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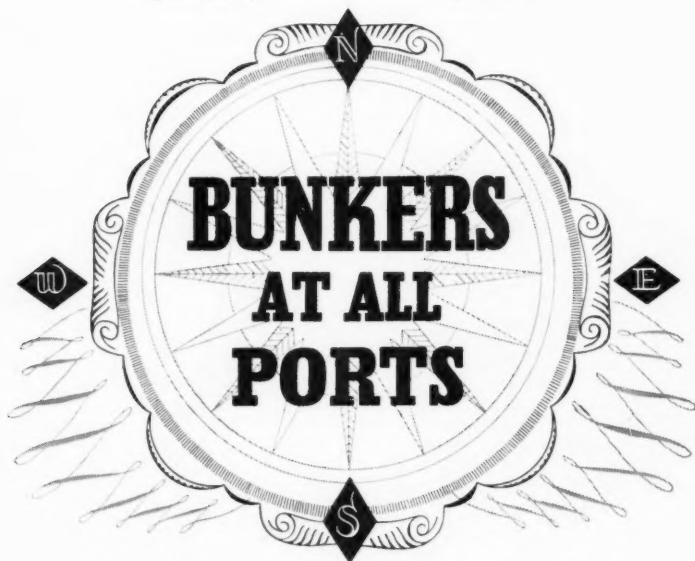
AND SHIPBUILDING & MARINE ENGINEERING NEWS



VOL. CXXV No. 3031

WEDNESDAY, AUGUST 1, 1951

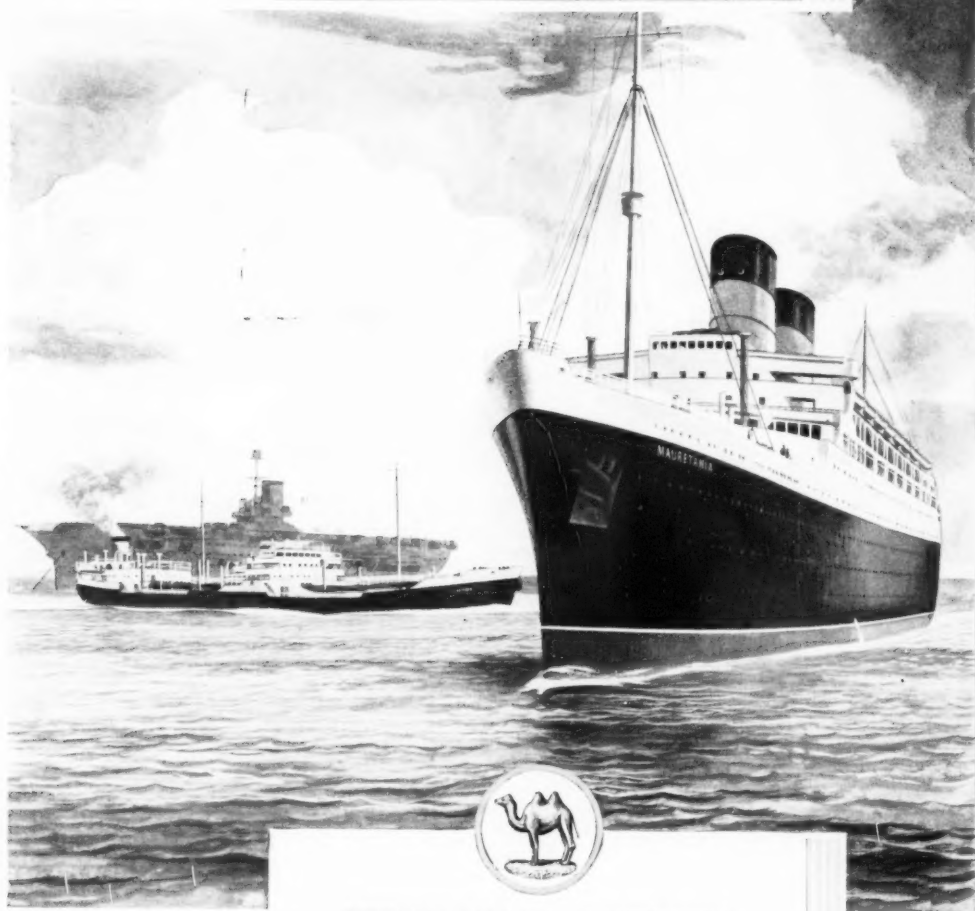
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In 1918, the Empresa Nacional changed its name to Companhia Nacional de Navegação. In 1936, Professor Rui Ulrich, now Portuguese Ambassador to the United Kingdom, was appointed

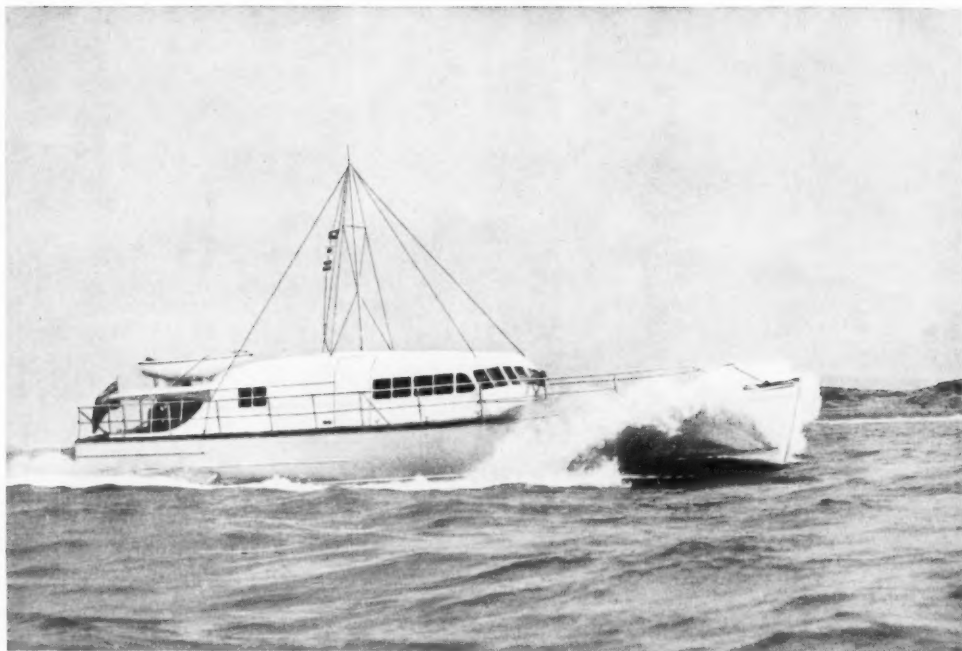
general manager of the board of directors, and under its new administration C.N.N. modernised its fleet.

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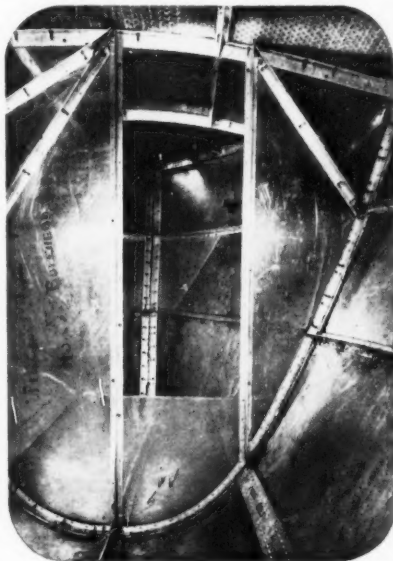
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



































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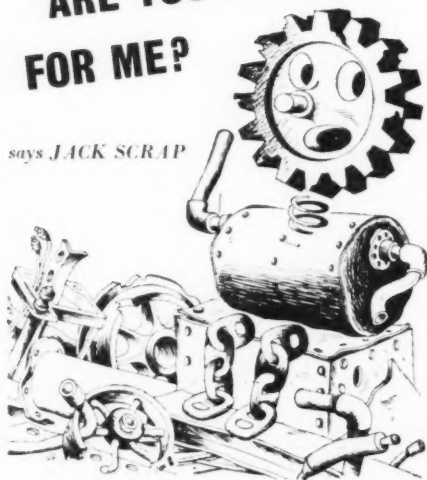
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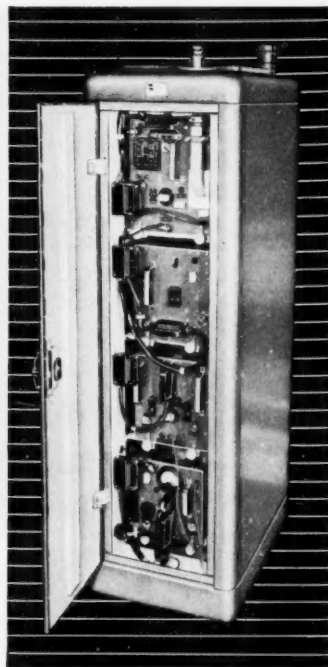
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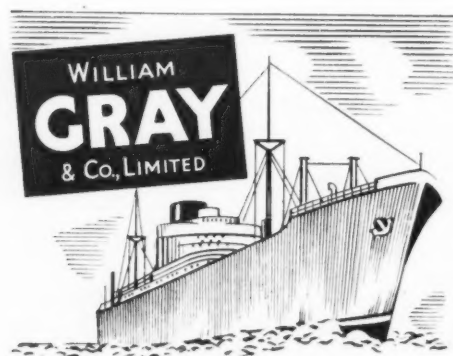
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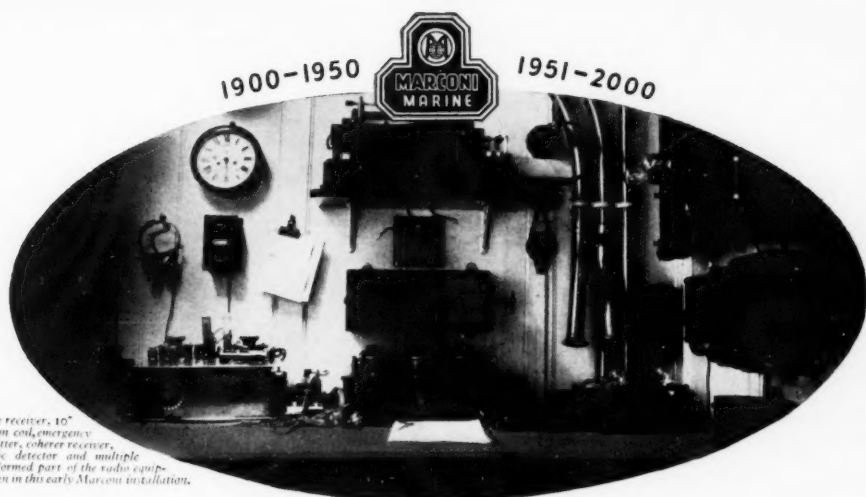
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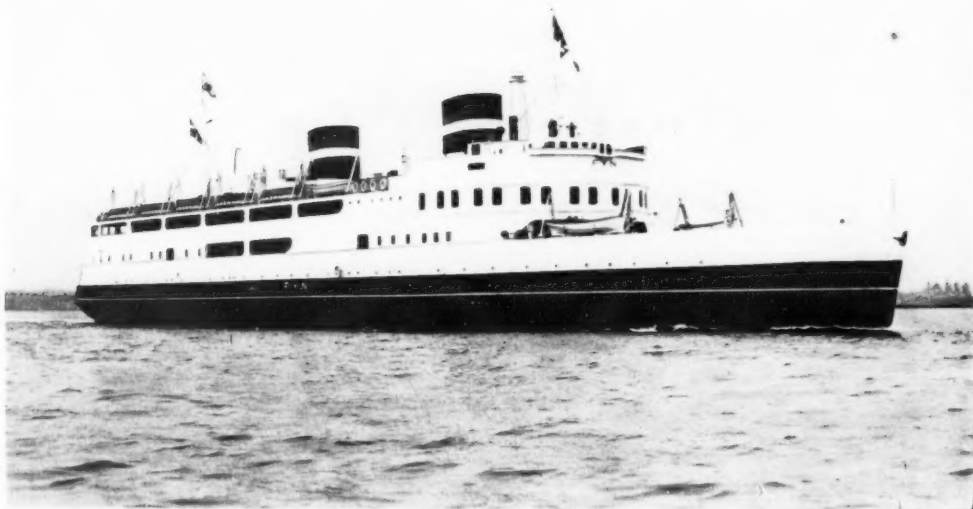
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AND SHIPBUILDING & MARINE ENGINEERING NEWS

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1883

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Exchequer, introducing his 1951 Budget

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THE SHIPPING WORLD

THE SHIPBUILDING SCENE

ONE can almost imagine the Chancellor of the Exchequer sitting at his desk with the red-printed accounts of losses of the nationalised industries on one side of him, and the accounts of taxes paid on profits in shipping and shipbuilding on the other. The juxtaposition must make him think, a tendency which has already made him unpopular with the less thoughtful of his colleagues. It may even be that he says to himself—very quietly, of course—“Thank heaven! the wild men haven’t got their hands on these yet.” For there is little doubt as to the great services that the maritime industries have rendered this country since the end of the war. The most recent indication of the magnitude of the work of the British shipbuilding industry is provided in the returns of Lloyd’s Register of Shipping for the three months ended on June 30. They show that the activity of the industry has remained at the high level it enjoyed during the first quarter, the tonnage under construction in Great Britain and Northern Ireland at the end of the last quarter again being in excess of 2,000,000 tons gross. For the complete year July, 1950, to June, 1951, inclusive, British shipbuilding has begun new ship construction at the rate of 1,477,000 tons gross and produced completed vessels totalling 1,320,000 tons, or 40 per cent of the world output during that time. The President of the Board of Trade must also look kindly on the industry, as no less than 34½ per cent of the tonnage under construction represents exports, while the great majority of the remainder will enable British shipowners to maintain and perhaps increase the invisible exports so essential in making a proper balance of trade, a matter which is becoming increasingly difficult.

On June 30 the total tonnage of ships under construction was 2,114,000 tons gross, of which 56 per cent comprised oil tankers. Nor is that the final extent of the achievement of this free industry, so well-known throughout the world, not least by its competitors, for its enterprise and ability. During the first half of

the present year, orders for new ships have amounted to over 2½ million tons gross, so that the order book of the industry as a whole contained contracts for 5½ million tons at the end of June, of which about two-thirds comprise ships yet to be laid down. The value of this very large programme of work is about £500,000,000 at current rates of shipbuilding costs, including export orders worth about £170,000,000. When some of the harsh things said about British shipbuilding and engineering for political purposes are recalled, it becomes clear that their only troubles are those which have been foisted on them.

For example, will there be sufficient steel to meet these orders without unduly delaying delivery of the ships yet to be laid down? The shipbuilders are powerless; steel is the care of the Minister of Supply, whose primary preoccupation during recent months has been to secure nationalisation of steel rather than to secure steel for the nation, two very different if not opposed considerations. Will there be power cuts and coal shortages in the coming autumn and winter? Only the Minister of Fuel can say and it is not supposed he will care to say, at this juncture, with the possibility of an early election. Will nationalised transport of materials and equipment to the shipyards become even slower and more costly? It is not known who exactly could answer this question, but we have had the benefit of some bitter experience. Shipbuilding employs products from every trade and almost every industry. Will taxation allow sufficient incentive throughout industry to give shipbuilders the materials they want at the prices required, or, even more important, at prices to meet renewed Japanese and German shipbuilding competition in a year or two? Perhaps this is a matter not for the Chancellor but for the electorate to answer. In the meantime, let us pay tribute where tribute is due—to the shipbuilders and the unsurpassed shipyard craftsmen of Britain for the great work they are doing.

Current Events

Higher Shipyard Wages?

THE HOPE that the cost of building ships would decline, in which some owners indulged a few years ago, with the result that they delayed placing orders, was not, of course, fulfilled, and it seems probable that those who have concluded contracts at the fantastic prices which have ruled in recent months may have reason to congratulate themselves. The Boilermakers’ Society is pressing its claim to bigger pay packets for many of its members. It has drawn up two resolutions demanding an increase in wages for time-workers, lieu-workers and piece-workers in the shipbuilding and engineering industries. They will be discussed at the forthcoming annual conference of the Confederation of

Shipbuilding and Engineering Unions at Swansea. Dismissing this inflationary scheme, Mr. E. J. Hill, general secretary, states that the cost of living has gone up by 10 points since last year, making a total increase of 24 points since 1947, and clothing and food have shown the biggest rises. “An increase in wages will not solve the problem of increased prices, but in the absence of any drastic action by the Government to reduce prices, the workers have no alternative but to claim an increase in wages to help meet the rising cost of living.” Mr. Hill must know that the more that is paid in wages, the higher will be the price of the goods which the workers must buy to live. There is no pool out of which inflated wages can be paid. They merely raise

the cost of living and make matters worse. He knows in his heart, as his statement implies, that this claim is an act of folly. The Government, with its wasteful expenditure on the groundnuts scheme, the egg-producing failure in Gambia, its vast expenditure on the Festival of Britain, and its swollen bureaucracies, is at fault. The economy axe should have been ruthlessly applied long since, as it was after the First World War. Now conditions are far more serious than they were then as the record of our overseas trading reveals, the gap between imports and exports becoming wider month by month.

A Manning Problem

THE GOVERNMENT has no easy problem to decide which industries should be regarded as so essential that young men must not be withdrawn for National Service. A strong case can be made out for the shipbuilding and associated maritime industries, for in peace and war ships are essential to an island community. We have yet to hear an admission from any Minister that he realises that he lives in an island and that, without ships, he and his fellow countrymen would starve in idleness. We never had a government which was less ship-minded than the present administration. But we hope that the First Lord of the Admiralty will appreciate that if the shipyards are denied labour neither ships of war nor ships of commerce can be built. Mr. R. W. Johnson referred to this problem the other day. All shipbuilders are finding it difficult to recruit labour for the craft trades. The Ministry of Labour cannot meet the demand and the apprenticeship system offers no solution in the present emergency. This method of recruitment, which has been so successful in the past, is, he confessed, proving of small value, in view of the fact that on completion of their apprenticeship young men are called-up for military service. As he remarked, "from past experience we have learned that in a national emergency the shipbuilding industry is vital to the security of the country, and we are firmly convinced that the building of ships is far more important than military training for shipbuilding and marine engineering personnel." It takes much longer to train a shipbuilder or a marine engineer than it does to train a soldier, as he claimed, and he expressed the hope that those in control would make provision to give shipbuilding and marine engineering employees immunity from National Service for as long as they remained in the industry. That is a reasonable claim and we trust that Mr. Johnson's plea will be emphasised in the House of Commons as soon as a suitable opportunity occurs for discussing this manning problem.

National Service for Seamen

THE GOVERNMENT'S continual inability to appreciate that this is essentially a maritime country never fails to amaze the informed onlooker. The latest example of this curious form of myopia may be seen from the question and answers in the House of Commons last week regarding the liability of seamen for National Service, or more appropriately, though this the Government spokesman denied, other forms of national service. When asked whether the Minister of Labour would consider exempting from national service those men who had served five years with the Merchant Navy, the Parliamentary Secretary replied that employment in this way in peacetime was not regarded as being equivalent to National Service, as in the case of a coal miner or agricultural worker. For this reason, any young man born after 1929, who leaves the sea before the age of 26 is liable to call-up, perhaps to spend 24 months in the Army or Air Force. It is impossible to understand a mind which recognises digging for coal or potatoes as national service but does not see why experience gained in keeping the sea lanes open should also qualify. The first criticism is whether or not the Parliamentary Secretary was accurate in terming the present world conditions those of "peacetime," an attitude which the vast sums being spent—and rightly

spent—on rearmament would appear to expose as groundless. With full-scale war in Korea, trouble in Persia and an Egyptian naval raid on a merchant ship flying the Red Duster, not to mention the fighting in Malaya, it is impossible to regard the present as a time of peace. The plain fact is that if war ever comes there is no part of Britain's industrial life more important than the merchant service. We may have time, as before, to build up army divisions, but both naval and merchant ships will be in the thick of trouble from the outset. The Minister of Labour should have second thoughts on the matter without delay.

Port Delays

ANOTHER illustration of the failure of the Government to face up to our insular problems is provided by its apparent indifference to the waste involved in the slow turnaround of ships. Shipowners continue to press for action, pointing out that it is useless to build, at great expense, swifter ships if they are forced, by circumstances beyond owners' control, to spend about twice as much time in port as the slower and cheaper ships of prewar days. A vast amount of capital lies idle day by day and running expenses are incurred and, in the long run, producers and consumers have to pay the bill. There is much talk among ignorant trade unionists of imposing further taxes on profits. If they would sweep away outdated restrictive practices and discipline the recalcitrant dockside workers, they would be rendering good service to the nation. Conditions are not yet as bad in our own ports as in some ports overseas, particularly in Australia and New Zealand, but we have no cause for boasting. The whole business is crazy and there will be no effective remedy until steps are taken to bring home to the workers generally the price they are paying for the failure of their leaders to grasp firmly the thistle. They have got out of touch with their members since Transport House was converted into, in effect, a legislative chamber whose policy is drawn up with little or no regard to the views of the rank and file. The shipping organisations have done their best to focus attention on this industrial disease, but the average M.P., irrespective of party, ignores its importance and is far more excited about some South African native's claim to rule than the efficient handling of our exports and imports.

The Coal Shortage

THE MINISTER of Fuel and Power cannot make up his mind whether or not to import coal in the winter months when it is obvious that there will be a grave shortage. The consequence will probably be a repetition of the troubles of last winter when a sudden call was made on shipping to carry coal from the United States. The Industrial Coal Consumers' Council has prepared a report reminding Mr. Noel-Baker of the crisis which is developing. All coal users are alarmed at the prospect of an increasing shortage. The Council has made the point that, if it is decided to import coal, it is essential that the decision should be taken in the very near future so that the imported coal could be moved to the point of consumption before midwinter. If coal arrives at our ports at Christmas, it will probably be impossible to move it as at that time railway facilities will be fully stretched, owing to darkness and climatic conditions, and, moreover, shipping will once more be disorganised. As is pointed out, the experiences of the past winter, coupled with the knowledge that opencast coal production in this country cannot have a long lease of life, confirm opinion that for some years to come there will be barely enough coal to meet the growing inland demands, plus essential exports. The Council warns the Government that, unless the improved trend in output resulting from Saturday or overtime working from rising manpower continues, there is a great danger that the country will very shortly be faced with another fuel emergency. This would lead to curtailment of industrial productivity or to a further postponement of a return to coal exports

on the scale needed to enable imports of food and raw materials to be increased. The Council emphasised most strongly that the cost of coal is of the greatest importance to industry and that, if coal costs can be stabilised, or better still if they can be reduced by greater productivity, it will be a great gain. The whole country would benefit by such a result, including the mineworkers themselves.

Re-alignment of Capital

THE LARGER part of the 1950-51 revenues of the Atlantic Shipping & Trading Co., Ltd., was derived from gross investment income, which contributed £114,000 to a profits total of £192,000, compared with £209,000 the previous year. Profits on ship operation, after providing an unstated amount for surveys, actually fell from £110,000 to £78,000. The financial year closed on March 31 last, so that the company will have had the benefit of rising freight rates for some six months only of the period under review. Considerable advantage has come from the intervention of the tax cushion—tax charges are down from £93,000 to £78,000—so that the net profit was left virtually unchanged at £74,100. As the repeated dividend of 15 per cent on the one-class capital of £350,000 costs no more than £27,600 net, it very obviously had ample cover. Moreover, the profit surplus is reinforced by special credits of £22,000. The finances of the company are admirably secure. The reserves, including £1,022,000 in the ship replacement account, amount to £2,284,000, or more than six times the issued capital. Ships costing £623,000 have been drastically written down to a book figure of £280,000 net, after an accumulated depreciation of £343,000. At the close of the financial year, the company held £2,414,000 in quoted securities, whose market value was £2,605,000, together with £185,000 in cash. These are imposing figures. It is proposed to use £50,000, being part of the capital reserve of £426,000, to provide for a one-in-seven share bonus, a book-keeping transaction which will help to bring nominal capital into more correct alignment with the capital employed, that is the issued share capital plus reserves and carry forward. In their brief report, the directors inform shareholders that all the vessels of the company's fleet have been fully maintained in accordance with their classification and are in first-class order. Operating profits should show improvement this year, despite the rising trend of costs.

Rising Costs offset Higher Freight

DESPITE the further improvement in tanker freight rates in the latter half of the year, the 1950 trading profits of the Northern Petroleum Tank Steamship Co., Ltd., fell from £347,000 to £288,000. The causes of this decline are stated by the directors in their report. During the year heavy expenditure was incurred on special survey repairs, and four vessels were out of service for an abnormal time undergoing repair. Then, though the opportunity was taken of renewing certain charters at improved rates, the effect of these more advantageous arrangements was not apparent in the accounts under review. After depreciation of £133,000, there was left a net profit of £121,000, against £187,000, subject to the transfer of £47,000 to income tax equalisation reserve and expenses of £12,000 incurred in connection with an increase of capital and loans. The dividend of $7\frac{1}{2}$ per cent on the higher one-class capital of £405,000 costs no more than £16,200, and is thus a conservative payment. In addition, shareholders receive a special cash distribution of 10 per cent (not subject to tax), which takes £40,500 of the surplus of £129,000 realised on the sale of a 22-years old vessel. The company is enlarging its fleet and at the end of the year there were outstanding commitments of £1,162,500 for new tonnage. The cash holding is down from £437,000 to £266,000, and it is proposed to seek an increase of borrowing powers. In this connection the directors state that, although arrangements have been made to finance the building programme, it will be

necessary for a short period to exceed the present borrowing powers of the company. Reserves stood at the ample figure of £1,421,000 at the end of the year and the fleet is doubtless reasonably valued at £1,865,000 after deduction of depreciation provisions totalling £897,500. Referring to the outlook for the current year, the directors cautiously remark that recent increases in operating costs will partly offset the upward trend of freight rates.

New Design of Survey Ship

SINCE the war frigates have been converted during construction for use as Royal Navy survey ships, but H.M.S. *Fidal*, which was launched from Chatham Dockyard on July 31, was laid down as a survey vessel from the outset and specially designed as such. With a length of 315 ft. and a beam of 40 ft., H.M.S. *Fidal* has a hangar and a deck arrangement suitable for flying a helicopter on and off. The helicopter will be used for air survey photography and the transport of shore parties. Three surveying motor boats, equipped with echo sounding apparatus, will also be carried. The latest electronic aids to surveying and navigation will be incorporated and there will also be a large process camera and a lithographic printing press to enable charts to be reproduced on board. Among other special features in her design is an air conditioning plant, which operates on the reversible heat pump principle. When used for heating, this plant extracts heat from the sea, even at Arctic temperatures. In the tropics it can be used for cooling purposes. This method saves considerable electrical load, only 120 kW being required to do the work for which 220 kW would be required in a direct heating plant. Electrical power will be supplied by 360-kW 220-volts D.C. diesel generating sets. The Dockyard, Chatham, is responsible for both hull and main machinery, which consists of four diesel engines, driving two shafts through reverse and reduction gearing.

The Story of Middlesbrough

THE PART that shipbuilding and shipping have played in the industrial development of Middlesbrough is stressed at an exhibition now being held in the town. Old prints, photographs, maps and diagrams trace the rise of the town, which began when the Stockton and Darlington Railway was extended to reach the Tees at a point where a farmhouse and one or two cottages stood. That was Middlesbrough, and it was first named "Port of Darlington," a shipping station set up by the railway pioneers. A print of the first ship to be built on the river, a sailing vessel of 300 tons built at Laing's shipyard and named the *Middlesbrough*, is on view, and another depicts the full-rigged clipper *Excelsior* of 850 tons, which at the time of building (1855) was the largest vessel to be built on the Tees. Also exhibited is the deed of partnership of the original Tees Steam Tug Company, now the Tees Towing Company, operated by Sir William Crosthwaite & Son. Interesting records of the Furness Shipbuilding Co., Ltd., which holds the present record of having built the *Kosmos* V (27,500 tons), the river's largest vessel to date, and has an order for a tanker of over 30,000 tons on hand, Smith's Dock Co., Ltd., the Tees Conservancy Commissioners' new oil berths and deep-water docks plan, are on view.

SAYINGS OF THE WEEK

POLITICS AND GOVERNMENT TRADING

"Sooner or later bulk buying and bulk selling by Governments are subordinated to political rather than economic considerations and engender suspicion rather than goodwill."—Sir Frank Alexander, president of the Institute of Chartered Shipbrokers.

THE ROAD TO SAFETY

"The road to safety lies in positive measures, such as increased production, incentive, more individual freedom, more invisible exports, less Government expenditure, and some restriction of credit."—Mr. Oliver Lyttelton, M.P.

ON THE "BALTIC"

DISADVANTAGES OF "SLURRY" AS A CARGO

By BALTRADER

UNTIL lately, most owners were only vaguely aware of the existence of slurry—another name for coal, but coal with a difference. It is small coal which is left over after washing and with a certain amount of earth still adhering to it. The result is that wet weather can reduce it to a sticky mess which leaves the trucks with reluctance. An attempt to load this cargo recently in Glasgow resulted in delay because the hoists were unable to tip the wagons sufficiently to empty them into the holds. Sixty or 70 tons per day was all the dispatch which could be achieved by this method, and it was found necessary to move the vessel back and forth from the hoists to discharging berths where grabs were in use. These berths had to be vacated when required for their proper employment by other vessels. The principal East Coast ports are said to be able to handle the loading of slurry with fair dispatch, but it cannot be described as a very satisfactory cargo. However, as an essential export it has come to stay and will increase, seeing that we cannot spare as much good coal as we would like to sell to our old customers. They, in turn, have to make the best of a bad job and accept from us this inferior coal at a suitable reduction in price in order to mix it with a better fuel. Meanwhile, owners will no doubt watch the position with care and refuse to accept slurry unless assured that appliances will be used, capable of affording reasonable dispatch. It is not satisfactory to go on demurrage at the customary rate, which in no wise compensates the owner for his loss of earnings. Incidence of demurrage is in any case a barren expenditure of money and waste of physical resources.

Far Eastern Market

The Far Eastern market is not what it was, as shown by the recent acceptance of 60s. for ore from Dungun (Malaya) to Japan, compared with 80s. paid not long ago. In that particular trade the competition of Japanese tonnage is becoming a factor to be reckoned with. However, the Chartering Committee did not find it so easy as expected to obtain tonnage for grain from Manchuria or North China to India. For quite a while they endeavoured to obtain a ship at 100s. per ton, later offering 105s. but declining tonnage offered at 110s. It was a surprise when it was announced that four vessels for September loading were fixed at 110s. and that more were required. For loading on the opposite coast there is lumber to be shipped from the North Pacific to South Africa and Australia and a little wheat from British Columbia to India.

One of the most striking contrasts with conditions of some months ago is the almost entire absence of inquiry on the freight market for grain carriers to India from North and South America and Australia. This may be partly due to the supplies of grain which are being received in India from North China. If that is the case, it is not a bull point for shipping, which benefited by the long haulage involved in voyages from the first-named countries. Several adverse factors have been in operation in the past month. The failure of South Africa to supply all the coal contracted for export has led to numerous cancellations of charters arranged at good rates in the past few months. Owners affected have been disappointed to find their vessels figuratively cast on a lee shore. In other directions, the River Plate grain market has once more proved a comparative failure; in the United Kingdom the import of grain has been checked by repletion and B.I.S.C. (Ore) has found its programme well covered for the time being. In the Mediterranean ore, as in the various trans-Atlantic trades, American tonnage has taken a larger part than for some time. Taking these matters into

account, it is remarkable that greater declines in freight have not occurred and that in fact there are in some places signs of a stiffening trend.

The "Nubaltwood" schedule of fixed rates for loading d.b.b. at the various Baltic ports and discharging in the United Kingdom makes interesting reading. No one with any experience of this trade will be surprised to see that the Hartlepoons lead with a rate of 50 standards per hatch per day when shore cranes are used. Why other famous ports should lag far behind is an important question. Why, for instance, should London only be able to guarantee a rate of 35 standards per hatch, Cardiff 30 and Liverpool 25? It is another example of the loss which Great Britain suffers year in and year out through indifferent port facilities. These are unequal to the extraordinary demands of a small island supporting over 50 million people largely by its imports and exports. British ports ought, like British shipping, to set a standard to the world for general efficiency.

The Freight Market

The outstanding feature of the freight market in the past week has been the trans-Atlantic trade. No move has yet been made to secure tonnage for the import of American coal to Great Britain, but Continental buyers are taking time by the forelock. Eire is also in the market. A generally steadier tone has been noted on the "Baltic" as a result of the prospects of much activity in the coming months, resulting from Europe's under-production of coal. The *Ameriki*, 9,200 tons, is fixed from Hampton Roads to Rotterdam at \$11.25, prompt loading, also, the *Anthony* at \$11.50 to Antwerp or Rotterdam for August loading, a rise of a dollar in the last week; and numerous other fixtures to Antwerp or Rotterdam have been arranged at varying rates. Four vessels of 9,000 tons, 10 per cent, have been fixed from Hampton Roads to Buenos Aires at \$17.50, option up river at \$18, September to December. The *Lumber Carrier*, about 9,200 tons, is chartered for coal from U.S.N.H. to Japan at \$21.25, early August. The *Hermiston*, about 6,600 tons, is fixed, Galveston and/or Port Sulphur to p.p. U.K. at 122s. 6d., sulphur, September/early October. *Sneaton*, 9,500 tons, and two vessels of 3,300 tons and 4,500 tons have been fixed from Cuba to the United Kingdom at 130s. for September loading. East of Suez, the *Hollybank*, 9,000 tons, will load bagged wheat, South Australia to Beira, at 110s., September; Calcutta to Adelaide or Melbourne, coal, is fixed at 110s., August; the *Argovan*, 9,000 tons, has taken \$13.25 for manganese ore, Vizagapatam to U.S.N.H., August 1/15. The Russians have taken the *Chios* and *Winter Hill* for soya bean shrotts, Dairen to the United Kingdom, at \$28 per ton, with charterers guarantee not to stow in more than 72 ft. bale per ton, August. Time charter inquiry is well maintained. Recent fixtures include m.v. *Riley*, 9,210 d.w., 10 knots on 7 tons, a trip to Australia, 61s. 3d. per month, delivery Sunderland late September, and m.v. *Anatina*, 9,500 d.w., 511,000 ft. bale, 13 knots on 16/18 tons, 42s. 6d. per month, 12 months, delivery Antwerp, early September.

Air Charter Business

Inquiry for aircraft is fully maintained, especially for movement of ships' crews. Much more business would be arranged if planes were available. The British air charter industry is handicapped in its development by insufficiency of larger planes. The opportunities for competition with foreign operation in the open market are at present somewhat reduced by Government commitments.

INSTITUTE OF CHARTERED SHIPBROKERS**Sir Frank Alexander on Bulk Buying**

AT THE annual general meeting of the Institute of Chartered Shipbrokers on Thursday, Sir Frank Alexander was re-elected president and Mr. C. K. Blakelock (Grimsby) and Mr. J. T. Saunders (Middlesbrough) were elected vice-presidents for the ensuing year. Mr. H. E. Ruffle (London) was re-elected chairman of the Council. The following were elected members of the Council: Messrs. Harry Collis (London), Alfred Garnham (London), L. H. Hoare (London), H. L. Hogg (West Hartlepool), T. C. Kettlewell (Goole), R. A. Knox (Newcastle), D. G. E. Probert (Swansea), W. F. Turner (Glasgow), F. G. Veale (Liverpool) and V. R. Young (London).

During his presidential address, Sir Frank Alexander said that the results of the efforts being made by the free nations to stem aggression had been to raise the cost of commodities, including freights and the prices of ships, to an artificial and unhealthy level. While shipbrokers in general had shared in this prosperity he felt that it must further delay the return to freedom of trade from Government control. The purchasing power of what looked like a good income was so reduced by excessive taxation and the high cost of living, that to build up reserves was almost impossible and the nation as a whole was forced to withdraw capital instead of saving. "Sooner or later bulk buying and bulk selling by Governments are subordinated to political rather than economic considerations and engender suspicion rather than goodwill. There is also the danger that we all feel so frustrated that we lose heart and our initiative." There was nothing more stimulating than keen competition, provided that if successful we could keep the rewards of our enterprise. It was the hope of reward that sweetened labour and when this incentive was taken away a "go slow" attitude inevitably followed and the whole nation suffered.

The Institute had done much for the shipbroking fraternity by improving its status and regularising its standards and charges and the effort of the Council to secure improvements in agency charges was a case in point. Membership over the year had shown an increase of 43 members, while the accounts showed a decrease in the excess of income over expenditure, of which the greater part was due to the cost of publishing two issues of *The Shipbroker*. Sir Frank expressed thanks to the retiring vice-presidents (Mr. D. M. Mitchell and Mr. O. J. Knudsen) for their valuable services, and also to the retiring members of the Council, paying special tribute to Mr. Ruffle, the chairman.

The Late Dr. John T. Batey

The death has occurred, shortly before his 89th birthday, of Dr. John T. Batey, who retired as managing director of R. & W. Hawthorn, Leslie & Co., Ltd., at the age of 75, having started in the firm as an apprentice under Mr. Andrew Leslie. He had been a director of Lawson-Batey Tugs, Ltd., since 1920 and chairman since 1934. He joined the North-East Coast Institution of Engineers and Shipbuilders in 1885 and became its president in its fiftieth year. After his apprenticeship he joined William Dobson & Co., Ltd., at Low Walker, for a time, returning to Hawthorn, Leslie's in 1901. He became a general manager and director in 1907 and managing director in 1921. He was president of the Shipbuilding Employers' Federation in 1927-28 and was for some years chairman of the Tyne Shipbuilders' Association. He lectured in naval architecture at the Rutherford College, Newcastle, and was awarded the honorary degree of Doctor of Science by Durham University in 1935. He was a member of the Technical Committee of Lloyd's Register from 1921 until 1937, and a vice-president of the Institution of Naval Architects from 1938 until his death.

Mr. A. H. CRAWLEY has been appointed assistant London manager of the Union Insurance Society of Canton, Ltd.

Shipping and Ceylon**Colombo Port Developments****By a Special Correspondent**

AN ORDER for 28 eighty-tons steel lighters and 12 two-tons mobile cranes for use in Colombo Harbour has been placed with manufacturers in the United Kingdom. The lighters and cranes are estimated to cost over Rs.1,500,000. They are equally urgently needed to meet the requirements of the port today. The lighters will be used by the Government primarily to load and unload the large quantity of foodstuffs that is now being imported. Additional warehouse accommodation that is now being provided has made it imperative that there should be more cranes. The whole order is to be completed within one year.

The order is the sequel to the mission to the United Kingdom of Col. P. A. J. Hernu, chairman of the Colombo Port Commission. Col. Hernu said that there was no chance of obtaining secondhand lighters from Britain or anywhere else in Europe. The steel position in Britain was extremely bad, he stressed. Secondhand lighters were costly and were not commercially advantageous to Ceylon, although quick delivery was guaranteed. The cost of new lighters was favourable but delivery bad. Col. Hernu also made inquiries for the purchase of vessels for the proposed merchant fleet of Ceylon. He received a number of offers and found four small coastal ships suitable for the purpose.

It is hoped that this and the other efforts that are being made to provide better facilities will result in the withdrawal of the 25 per cent freight surcharge that is now being levied by lines belonging to the British and Continental Conferences. The Ceylon Government made a strong protest to Britain against this levy, but a statement issued on behalf of the Conferences stated that the decision to levy the surcharge was not arrived at hastily but after careful consideration. The Minister of Transport was notified, as far back as July 1950, that unless delays to ships could be substantially reduced by improving conditions in the port, the introduction of a freight surcharge would have to be faced. These delays had caused a dislocation of the regular services provided by the lines and had also involved the lines in considerable additional expense. Another contributory factor to the slowing down of the work of the port was the deterioration of the standard of labour at present at the disposal of the stevedores. As a result of the Ceylon Government's protest against this surcharge, Mr. Eric Millbourne, Adviser to the Ministry of Transport in the United Kingdom, has been appointed as a member of the two-man Committee that is to inquire into conditions in Colombo. Meanwhile, United Kingdom and Continental lines have decided to raise freight rates to Colombo by a further 15 per cent with effect from September 1.

Colombo Harbour Development

Preliminary work on the south-west breakwater quay in connection with the Colombo Harbour development scheme, the contract for the building of which has been secured by a French firm, has begun. The south-west Breakwater Quay will be 3,000 ft. long and will provide berths for five big ships. It will be similar to the north-east Breakwater Quay, where work is being executed ahead of schedule. Large transit sheds, with special accommodation for passengers, will be provided at each berth. Supplies of fresh water and oil fuel will also be available at these berths. Excavation work for the north pier of the oil dock has already begun. The 35-ton diesel-electric floating crane, which was towed from Casablanca to Colombo, has been reconditioned and is now working.

An all-time record was created in the quantity of trade handled by the port of Colombo during 1950. There was also an appreciable increase in the volume of shipping that called at the port. The total visible trade amounted to 4,864,667 tons which exceeded by 164,508 tons the 1949 aggregate of 4,682,159 tons, an increase of 3.5 per cent. A total of 1,439 ships took oil bunkers in the port last year, a 60 per cent increase over the 1949 figure. There was, however, a decrease in coal bunkers due to the falling off in the number of coal-burning ships. Passenger traffic again showed considerable increase. The average figure of over 1,000 passengers per day passed through Colombo last year, a 50 per cent increase over the 1949 figure. The tonnage of cargo imported into the island, which constituted 68.5 per cent of the total tonnage handled through the port, excluding coal, oil, water and transshipment cargo, rose from 1,509,427 tons in 1949 to 1,550,100 tons in 1950, an increase of 2.7 per cent.

COAL AND OIL

COAL BUNKERS AND EXPORTS

In Parliament last week the Minister of Fuel and Power was asked if he would give an assurance that coal for bunkering British ships and ships on charter to the United Kingdom would be given priority over coal for export. Mr. Noel-Baker replied that it was not practicable to give overriding priority to bunkers over exports, although he was anxious that no avoidable delay should be caused to the movement of ships. It was pointed out to the Minister that dislocation was already taking place and that ships were being diverted because of lack of coal bunkers, and that bunkering was in some cases uneconomically done. The Minister replied that in one case other coal was supplied for the ship in question because the National Coal Board could not supply coal which was loaded for export, but he was making further inquiries. Meanwhile, it can be noted from the Ministry's returns that coal exports this year are lagging far behind last year's levels, although the amount of coal consumed for bunkers is much the same. In the first 28 weeks of the year, 3,536,000 tons of coal were exported, compared with 7,863,000 tons in the same period of 1950, while bunkers so far this year amount to 2,014,000 tons, compared with 2,302,000 tons last year in the same period.

Coal and Oil in South Africa

THE crude oil refinery which is being built in Durban at a cost of £4,500,000 would normally be expected to take its crude oil from Persian oilfields, but if this should not be possible crude oil will have to be transported from Arabia, Venezuela or other sources, thus increasing the costs of transportation. However, the Durban refinery is regarded as an essential step towards making South Africa "less" dependent on other countries for her oil products. This plant is expected to process more than 25,000,000 gallons a year, while the South African Coal & Gas Corporation, Ltd., which was formed in September last, expects to start producing 50,000,000 gallons of petrol a year from coal early in 1954. The managing director, Mr. P. E. Rousseau, said in a recent interview that the Corporation also expected to produce annually 5,500,000 gallons of diesel oil and 5,000,000 gallons of solvents and waxes. Contracts for £8,000,000 worth of equipment have been placed, mainly in Germany, and deliveries are expected to begin next summer. Although the plant will use about 1,750,000 tons of coal a year, it is believed that this demand will not affect other coal consumers because the Corporation proposes to mine its own coal.

Middle East Oil Supplies

It is fortunate that with the suspension of shipments of Persian oil, there has been an expansion of output in nearly all other producing and refining countries in the Middle East. According to the Petroleum Press Service, the most striking advance has taken place in Kuwait where crude oil output, which began only at the end of 1946, rose to a total of 6.4 million metric tons in 1948 and to 17.3 million tons in 1950. Output reached 2,092,000 tons in May and has risen again substantially in both June and July. A further stepping-up of output can be expected. Kuwait's refining capacity is only about 25,000 barrels per day, designed to cater for local needs and for bunkers. Saudi Arabian production reached a new high level in June of 3,069,000 tons, or an annual rate of nearly 37 million tons. Runs-to-stills at Aramco's refinery at Ras Tanura have risen recently to new high levels, reaching a record daily average output of 177,087 barrels in June, equivalent to an annual throughput of about 8.8 million tons. Last year's yields of products were about 23.5 per cent gasoline, 8.3 per cent kerosene, 28.3 per cent

diesel oil, 39.7 per cent fuel oil, and 0.2 per cent asphalt. Bapco's refinery on Bahrain Island has a capacity of about 156,000 barrels per day, treating, in addition to Bahrain's own crude oil output of about 1½ million tons a year—which is not likely to be greatly expanded—crude oil from Saudi Arabia. Crude oil production in Qatar—which began in December 1949—is now running at about 2½ million tons a year and cannot rise much unless new reserves are discovered. Iraq's production is now running at nearly 8 million tons a year. The new Zubair field is expected to begin producing early next year at a rate of about 2 million tons a year. A further 13 million tons a year of new production should be forthcoming from Iraq towards the middle of 1953, following the completion of the new 30-in. line from Kirkuk to Banias; smaller quantities will probably be pumped through the line late in 1952. But the earliest addition to existing supplies from Iraq could come from the lifting, by the Iraqi Government, of the ban on the transport of oil through the pipeline to Haifa. As well as bringing back into use urgently needed idle refining capacity at Haifa, this, together with the early completion of the parallel line which now only awaits the construction of the small portion in Israel territory, would nearly double the country's current output.

Shorter Notes

THE National Coal Board has approved a scheme for opening a new colliery in the anthracite area near Llanelly, which is estimated to cost £7,500,000 and is calculated to produce 1,000,000 tons of saleable coal annually. It will come into production in 1956 and reach full output in 1962, when it will employ about 3,450 men. Reserves of workable coal have been assessed at more than 100,000,000 tons, enough to keep the colliery fully employed for more than a century.

CRUDE oil production in Saudi Arabia last month amounted to 22,761,147 barrels, or an average of 758,705 barrels per calendar day, according to the Arabian-American Oil Company. Output at the company's refinery at Ras Tanura amounted to 5,312,613 barrels. Crude oil production for the first six months of this year amounted to 121,496,404 barrels, an average of 671,251 barrels per calendar day.

OFFICIAL NOTICES

New Company

UNITED KINGDOM TIMBER TRADE SHIPOWNERS' DEMURRAGE ASSOCIATION, LTD., 3/6 BURY COURT, ST. MARY AXE, LONDON, E.C.3. Registered July 16. Committee: F. P. Longton, 7/13 Creech Lane, London, E.C.3; J. A. Billmeir, 9 St. Helen's Place, London, E.C.3; E. J. K. Goldsmith, 8 Lloyds Avenue, London, E.C.3; and A. S. Wightman, E. Workman, J. R. Cooper, G. Dixon, Sir J. Fisher, G. F. Rainforth and R. F. Scovell.

[Information from *Jordan's Daily Register of New Companies*]

Furness Shipbuilding Co., Ltd.

The board of the Furness Shipbuilding Co., Ltd., has announced that although there has been a change in ownership of the shares and debentures of the company no changes are intended in the policy of the company, which will remain a private company. No public issue of capital is contemplated. Mr. Stephen Furness remains as chairman and all the present board who are executives of the company continue in office. Mr. John McGovern, who retired from his office as managing director some years ago, has now resigned from the board, and Mr. Arthur Bailey, who has been with the company continuously since his apprenticeship and who is now shipyard manager, has been appointed assistant general manager and director. The secretary, Mr. Alan Archibald McNaughton, has also been appointed director and Mr. Charles Clore and Mr. Leonard Sainer have joined the board. Mr. Clore is a director of the British Oil Shipping Co., Ltd., and Stevinson, Hardy & Co., Ltd.

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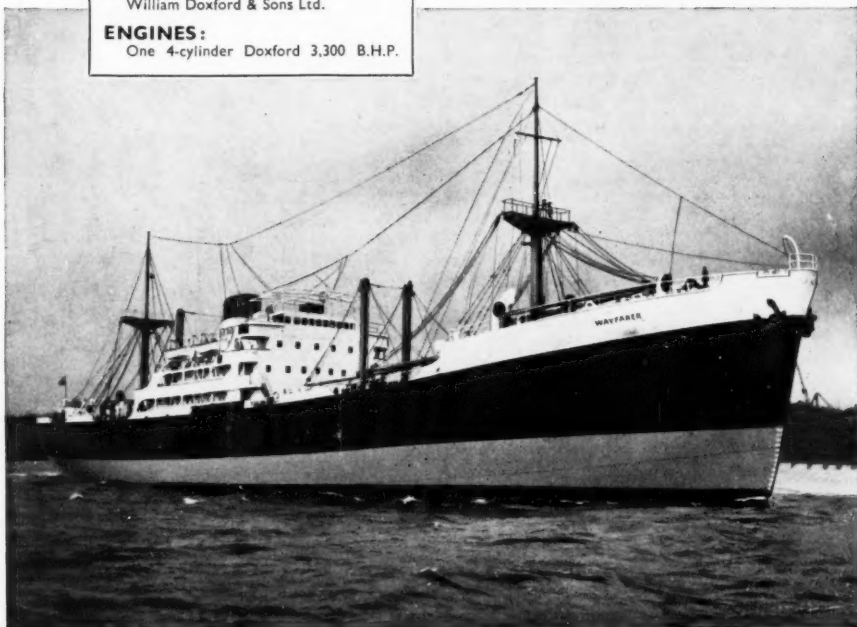
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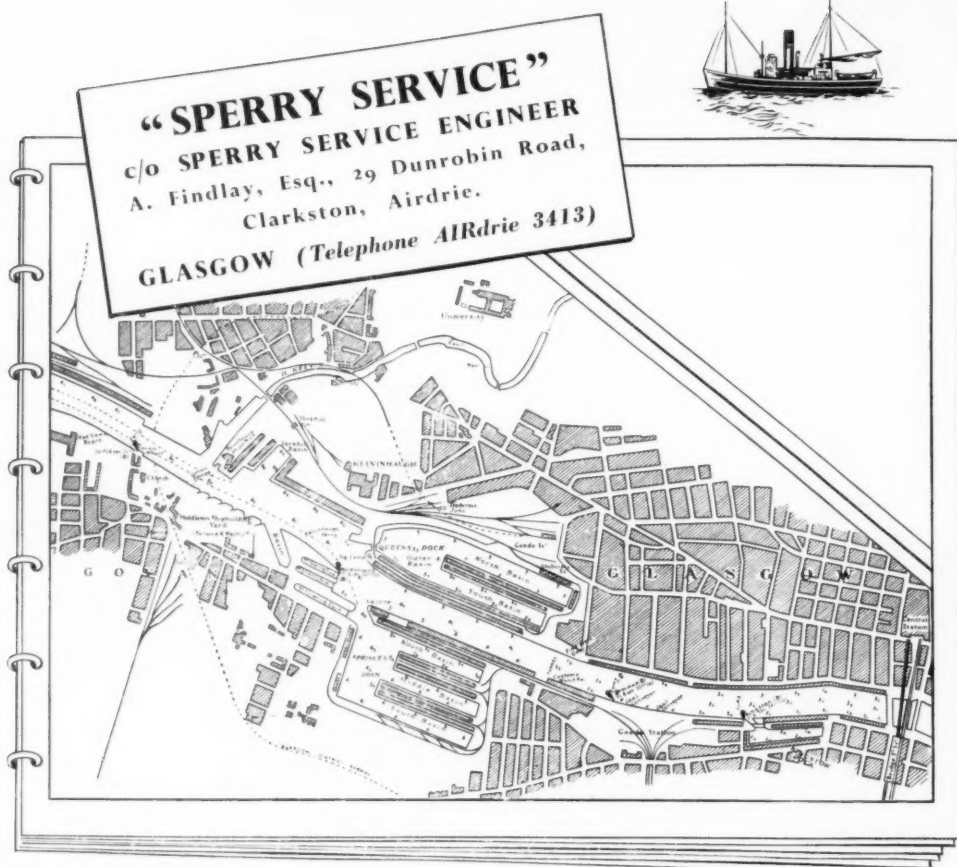
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The spread of a dozen major industries has left its mark along the banks of the Clyde since Glasgow received its Celtic title of *glas ghu*, "the dear green spot." Little more than a century has passed since the river was fordable and there were good salmon to be caught

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ANALYSIS OF BRITISH TONNAGE

UNITED KINGDOM MERCHANT SHIPS IN PRIVATE OWNERSHIP

THE accompanying tables provide a detailed statistical analysis of merchant ships in private ownership on the United Kingdom and Colonial register. The tables break down the structure of the Mercantile Marine into its constituent parts and further subdivide some of the groups into age and size categories. Full details of the definitions according to which these tables are compiled were given in THE SHIPPING WORLD of January 24, 1951. They do not include Canadian-owned ships which have been transferred to United Kingdom registry.

The merchant fleet covered by the statistics, as shown in Table I, showed a net increase of 31,361 tons gross in the first half of this year, after making adjustments for tonnage alterations and the disposal of ships for breaking up or to foreign flags. The net gain in the last quarter was 103,299 tons gross, but this was offset by a decline of 73,938 tons in the first quarter. Since July 1950 the net increase has amounted to 249,794 tons. The tanker fleet alone increased by 251,953 tons gross during the last 12 months, ocean-going liners by

203,056 tons and coastal shipping by 27,680 tons; but against this there was a decline of 232,803 tons of ocean-going tramps, of which 62,718 tons were removed in the last quarter.

During the quarter, the tonnage of ocean-going liners increased in all size groups except the largest, which shows no change, and the smallest (3,000/5,999 tons), which declined by nearly 50,000 tons. The only increase in ocean-going tramps was in the 5,000/5,999 tons group, amounting to 16,335 tons. As for age, nearly 100,000 tons of new liners were added during the quarter, while 42,717 tons built in 1931 and earlier were disposed of. New tramps totalling 22,728 tons were quite insufficient to make up for losses in the war-built and pre-1932 age categories. In the coastal section, the only major gains were in collier tonnage, which increased by 12,148 tons in the quarter. The collier fleet has increased by 36,426 tons in the last 12 months.

Tankers of 12,000 tons gross and over have practically doubled in tonnage since July 1950, having

TABLE I
BRITISH MERCHANT SHIPS IN PRIVATE OWNERSHIP*

	1 July, 1950 Tons gross	1 Jan., 1951 Tons gross	1 July, 1951 Tons gross
Non-tankers :			
Ocean-going liners	7,898,860	8,034,652	8,101,916
Ocean-going tramps	3,245,524	3,161,635	3,012,629
Short-sea and coastal	1,571,070	1,587,093	1,598,750
Tankers	12,715,454	12,781,380	12,713,295
	3,501,232	3,651,739	3,753,185
Total	16,216,486	16,435,119	16,466,480

* Vessels of 500 tons gross and over in private ownership and on the United Kingdom or Colonial register, according to records available and information received by THE SHIPPING WORLD up to the dates specified. Tonnage managed by shipowners on behalf of the Ministry of Transport, or managed on behalf of Canadian owners (but registered in the U.K.) is not included.

TABLE II
AGE OF OCEAN-GOING LINERS AND TRAMPS
Dry cargo and passenger vessels of 3,000 tons gross and over*

LINERS			TRAMPS		
1 July, 1951 Tons gross	1 April, 1951 Tons gross	Year of Build	1 April, 1951 Tons gross	1 July, 1951 Tons gross	
1,957,724	2,000,441	1931 and earlier	626,883	599,711	
28,392	28,392	1932	20,510	20,510	
36,752	36,752	1933	13,177	13,177	
59,727	61,437	1934	—	—	
133,647	132,046	1935	27,995	28,017	
253,852	253,852	1936	56,243	56,243	
222,838	220,777	1937	44,306	44,306	
201,253	199,592	1938	46,085	46,085	
252,957	252,957	1939	60,644	60,644	
222,536	222,513	1940	173,402	165,856	
95,934	94,209	1941	286,368	258,809	
359,703	352,741	1942	356,012	348,852	
697,332	695,558	1943	443,885	430,284	
618,764	619,191	1944	456,476	433,834	
396,535	396,608	1945	205,055	197,729	
432,095	432,097	1946	66,355	73,913	
474,860	474,818	1947	51,033	51,033	
546,641	547,240	1948	23,634	23,634	
495,150	495,150	1949	64,783	64,783	
467,267	467,312	1950	72,481	72,481	
147,957	48,668	1951 to date	—	22,728	
8,101,916	8,032,451		3,075,347	3,012,629	

* Excluding cross-channel passenger ships of 3,000 tons gross and over, which are included in Tables III and V.

TABLE III
LINER TONNAGE BY SIZE
Dry cargo vessels of 500 tons gross and over

	1 Jan., 1951 Tons gross	1 April, 1951 Tons gross	1 July, 1951 Tons gross
Ocean-going			
30,000 t.g. and over	234,770	234,770	234,770
20,79,999 t.g.	731,647	731,647	759,279
15,19,999 t.g.	352,408	336,901	354,752
10,14,999 t.g.	1,237,151	1,213,752	1,225,672
6,9,999 t.g.	4,355,854	4,399,314	4,460,895
3,5,999 t.g.	1,122,822	1,116,067	1,066,548
Total ocean-going	8,034,652	8,032,451	8,101,916

* Coastal, etc. :			
1,500/2,999 t.g.	267,218	262,146	256,594
500/1,499 t.g.	116,812	183,891	183,284
Cross-channel passenger ships	189,875	188,365	189,340
Total	8,678,557	8,666,853	8,731,134

This table does not include colliers as shown separately in Table V, or tankers.

TABLE IV
TRAMP TONNAGE BY SIZE
Dry cargo vessels of 500 tons gross and over

	1 July, 1950 Tons gross	1 Jan., 1951 Tons gross	1 April, 1951 Tons gross	1 July, 1951 Tons gross
Ocean-going :				
7,000 t.g. and over	1,507,198	1,501,854	1,479,780	1,421,451
6,6,999 t.g.	401,115	374,415	361,372	355,751
5,5,999 t.g.	737,221	732,084	701,081	717,416
4,4,999 t.g.	443,807	403,950	384,523	379,755
3,3,999 t.g.	156,183	149,332	148,591	138,256
Total ocean-going	3,245,524	3,161,635	3,075,347	3,012,629
Coastal, etc. :				
1,500/2,999 t.g.	206,900	205,967	213,389	215,216
500/1,499 t.g.	234,530	231,156	227,454	226,246
Total U.K.	3,686,954	3,598,758	3,516,190	3,454,091
On Colonial register	213,003	218,684	226,657	226,907
Total	3,899,957	3,817,442	3,742,847	3,680,998

TABLE V
COASTAL AND SHORT-SEA TRADERS
Ships of 500 to 2,999 tons gross*

	1 July, 1950 Tons gross	1 Jan., 1951 Tons gross	1 April, 1951 Tons gross	1 July, 1951 Tons gross
Liners, short-sea	275,004	267,218	262,146	256,594
.. coastal	187,310	186,812	183,891	183,284
.. passenger*	189,586	189,875	188,365	189,340
Tramps, short-sea	651,900	643,905	634,402	629,218
.. U.K. coastal	206,900	205,967	213,389	215,216
Colliers*	234,530	231,156	227,454	226,246
	264,737	267,381	289,015	301,163
On Colonial register (dry cargo)	1,358,067	1,368,409	1,364,260	1,371,843
Tankers	213,003	218,684	226,657	226,907
	1,571,070	1,587,093	1,590,917	1,598,750
	105,786	106,548	107,057	106,700
Total	1,676,856	1,693,641	1,697,974	1,705,450

* Cross-channel passenger ships and coastal colliers of over 3,000 tons gross are included in this table.

TABLE VI
TANKER TONNAGE BY SIZE
Ships of 500 tons gross and over*

	1 July, 1950 Tons gross	1 Jan., 1951 Tons gross	1 April, 1951 Tons gross	1 July, 1951 Tons gross
Ocean-going				
12,000 t.g. and over	112,848	196,680	209,482	221,554
10,11,999 t.g.	815,070	868,125	869,031	934,604
8,9,999 t.g.	1,569,117	1,604,563	1,613,963	1,647,876
6,7,999 t.g.	604,237	609,212	602,356	581,731
3,5,999 t.g.	226,831	221,114	215,180	215,223
Total ocean-going	3,328,103	3,499,694	3,509,912	3,600,988
Coastal, etc. :				
500/2,999 t.g.	105,786	106,548	107,057	106,700
Whaling factory ships	3,433,889	3,606,242	3,616,969	3,707,688
	67,343	45,497	45,497	45,497
Total	3,501,232	3,651,739	3,662,466	3,753,185

* This table does not include tankers used as store ships, and excludes Admiralty tankers.

(NOTE : Table VII will be found overleaf)

increased from 112,848 tons to 221,554 tons. There were gains in all size categories during the quarter except for tankers of 6,000/7,999 tons. New tanker tonnage commissioned totalled 106,067 tons gross, but the disposal of older tonnage reduced the net gain to 91,076 tons gross.

TABLE VII
OCEAN-GOING TANKER TONNAGE IN AGE GROUPS
Ships of 3,000 tons gross and over*

Year of build	1 July, 1950 Tons gross	1 Jan., 1951 Tons gross	1 April, 1951 Tons gross	1 July, 1951 Tons gross
1931 and earlier	727,571	689,479	670,454	643,633
1932	18,617	18,617	18,617	18,780
1933	37,140	37,166	37,166	37,166
1934	4,085	4,085	4,085	4,085
1935	66,107	66,107	66,107	66,107
1936	103,724	103,724	103,724	103,754
1937	140,790	140,790	130,374	130,374
1938	111,025	111,025	111,025	111,025
1939	118,035	118,035	118,035	118,035
1940	16,461	16,461	16,461	16,461
1941	112,590	112,590	112,590	112,590
1942	177,049	177,049	177,049	177,058
1943	244,115	244,092	244,092	234,288
1944	432,935	432,935	422,223	422,231
1945	306,537	327,785	338,404	359,828
1946	209,348	209,348	209,348	209,348
1947	76,793	76,793	76,793	76,793
1948	129,890	129,890	129,890	129,890
1949	192,894	192,894	192,894	192,894
1950	102,397	290,829	303,838	303,838
1951 to date	—	—	26,743	132,810
Total	3,328,103	3,499,694	3,509,912	3,600,988

* This table excludes whaling factory ships, coastal tankers, tankers used as store ships, and Admiralty tankers.

(Continued from next column)

of age. More modern tonnage can normally be sold abroad when sellers are willing to block the purchase price against newbuilding replacement. The oil-burning turbine vessel *Peter Dul* (10,100 tons d.w., built U.K. 1945, fitted with three 120-ton derricks) has been sold to the Ben Line at about £325,000. The oil-burning steamer *Granhill* (9,907 tons d.w., built U.K. 1944) has been sold to British owners at £350,000. The Norwegian motor vessel *Jadarland* (722 tons d.w., built 1947) realised about £130,000 from British buyers.

During the quarter there has been considerable speculation as to the future policy of Japan regarding further purchases, but so far only three or four additional import and currency licences have been granted and these in respect of vessels sold some weeks ago. There is still talk of a further currency allocation, but Japan appears to be short of the necessary foreign exchange to undertake any extensive purchase programme. Germany, having had the foresight to undertake a large purchase programme some 18 months ago, now appears to have little intention of purchasing further tonnage at present prices; in any case, foreign currency is not readily available. A few vessels have been sold to Italy, but it is understood that foreign currency difficulties exist and several proposed purchases have not been approved by the Italian authorities. Sporadic inquiry for tonnage of recent construction emanates from Norway, Sweden and Denmark; Finland is still inactive. Turkey appears uninterested in further purchases at present prices.

Tanker Values

Although the seasonal decline in freights has produced a corresponding decline in tanker values, there is still considerable demand particularly for large charter-free tankers and several sales are reported; the situation in Persia does not appear to have had any radical effect on tonnage values or on purchase demand. The following tanker sales have been effected:—

Name	Tons d.w.	Built	Survey	Price	Buyers
Jamaas (m.t.)	13,625	1933	1946	£465,000 (including time-charter until 1954 at 22s.)	Norwegian
Brajara (m.t.)	12,262	1934	1948	£635,000	Jugoslavia
Atlantic II (oil)	12,020	1921	1950	\$1,200,000	Panama—resold Poland at about same price.
Solsten (m.t.)	8,375	1929	1949	£306,000	Panama

TIMBER is being exported from South Africa in increasing quantities, and in recent months three full shiploads and three part shipments, totalling 10,000 tons, have been exported to Italy. The type of wood exported is the Saligna gum tree, from which rayon is made in Italy.

Ship Sales Market

Precipitous Rise in Values

THE quarterly ship sale and purchase market report issued by Harley, Mullion & Co., Ltd., states that there has continued to be a keen demand for large modern vessels, and with only limited tonnage offering for sale, prices have risen steadily and have now reached an unprecedented level. The following sales of American-built Liberty type vessels evidence the precipitous rise in values during the past year:—

Sold	Name	Tons d.w.	Built	Survey	Buyers	Price
6/1950	Leicester (oil)	10,570	1944	1948	British	£105,000
10/1950	Livia (oil)	10,840	1943	1947	Greek	£200,000
6/1951	Wye Valley (oil)	10,568	1944	1948	Panama	£400,000

It will be seen that during the past year values for large war-built tonnage have risen by approximately 300 per cent; as further evidence of this it will be recalled that the Canadian-built coal-burning steamer *Fort Dauphin* (about 10,330 tons d.w., built 1943) was sold in March 1950 by the Ministry of Transport to British buyers at £75,000. The similar steamer *Fort Enterprise* was sold in June by the Ministry of Transport at £306,000. The following additional sales of large war-built oil-burning steamers have also been effected during the quarter under review:—

Name	Tons d.w.	Built	Survey	Price	Buyers
Grey County	10,445	1944	1948	\$1,000,000	Panamanian
Vindafjord	10,500	1943	1951	\$1,000,000	"
Auroucan de Larrinaga	10,500	1944	1948	£350,000	"
Argos Hill	10,100	1942	1948	£345,000	British
Ruydael	10,490	1942	1948	£350,000	Panamanian
St. Croix	10,700	1942	1947	\$1,125,000	"
Aristocratis	10,800	1943	1948	\$1,100,000	"

An interesting transaction is the sale to foreign buyers of the three oil-burning steamers *London Vendor* (10,742 tons d.w., built U.S.A., 1943), *London Mariner* (10,232 tons d.w., built U.K., 1943) and *London Craftsman* (11,137 tons d.w., built U.K., 1940). These three vessels, sold by London & Overseas Freighters, Ltd., who have a large replacement programme, are trading on time charter until the end of the year and realised £365,000, £350,000 and £357,000 respectively, the *London Vendor* being sold to Panamanian buyers and the other two vessels to Italians. There is still an active demand for tonnage of this type, preferably for payment in sterling, and although little tonnage is presently offering for sale it is possible that current values will tempt more owners to sell.

Older Tonnage

Older tonnage has not shown the same steep rise in values but there is a reasonable demand for vessels available at relatively low capital outlay. An interesting sale is that of the British coal-burner *Atlantian*—about 9,800 tons d.w., built 1928, survey 4/1947—which was sold in April at £160,000 with delivery in the United Kingdom and simultaneously resold at £220,000 with delivery in the Far East. The following sales are also reported during the past quarter:—

Name	Tons d.w.	Built	Survey	Price	Buyers
Kefalonia (oil)	10,800	1945	1948	£365,000	Australian
Duke of Sparta (oil)	9,900	1940	1950	£400,000	Italian
Forest (m.v.)	9,150	1937	1949	£410,000	Dutch
Camerata	9,078	1928	1951	£225,000	Panamanian
Theodore (oil)	8,690	1919	1949	£150,000	Panamanian
Cauger (oil)	8,500	1919	1949	£167,000	Italian
Arosa (m.v.)	8,000	1924	1948	£215,000	Italian
Clan Maciver (oil)	7,350	1921	1947	£72,500	Costa Rican
Kanal	4,600	1917	1948	£80,000	Panamanian (damaged)
Troston	2,800	1943	1947	£57,000	(delivery Far East) Norwegian

Future Trends

Speculation as to future values is always rash and particularly so at the present time when political influences dominate the situation. As the quarter ends, indications of a cease fire in Korea, accompanied by congestion of tonnage in certain areas, has produced a lowering of freights in some markets, but the end of the Korean incident is unlikely to herald a period of real peace in the world and is equally unlikely to affect the rearmament and stockpiling programmes, which must continue to exert inflationary pressures. Peace in Korea is, however, likely to produce easier markets in the immediate future, and there might be some reduction in values, but taking a longer term view there seems little to suggest any really substantial fall in prices.

There has been no change in the attitude of the Ministry of Transport towards transfer to foreign owners, transfer being readily given in the case of vessels exceeding 15 years

(Continued in previous column)

LIFEBOATS FOR SHIPS

RECENT DEVELOPMENTS AND FUTURE TRENDS IN ALUMINIUM CONSTRUCTION

By a Special Correspondent

LIFESAVING rules, in their present form, date from the *Titanic* disaster, resulting in the International Conference on Safety of Life at Sea which was held in 1913. This Conference formulated the rules subsequently adopted by the major maritime countries and which still form the basis for the lifesaving appliances now carried on board ship. There were no great changes in the standards for L.S.A. until the last war, but the period 1939-45 saw the advent of many new regulations designed to increase the chances of survival of the crews of the vessels lost due to enemy action. The end of the war meant that some of these rules could be discarded but it was felt desirable to retain some of them and the question of the extent of these was eventually decided during the International Conference on Safety of Life at Sea held in London in 1948.

The major changes decided by the Conference were that all vessels of more than 1,600 tons gross would be required to carry at least two lifeboats, one of which must be a motor boat, and the boats must be carried under mechanical davits. These rules, although very desirable from the point of view of safety of life at sea, are all adding to the present-day tendency of increasing cost of ships and it is, therefore, worthwhile to examine the present position to discover whether, from the point of view of economy, any changes could be made to help shipowners and shipbuilders to reduce the ever-increasing costs of lifesaving appliances. First cost is not the only criterion as obviously the maintenance due to wear and tear must be taken into account and what is required is simple, relatively inexpensive equipment which can be expected to last the life of a vessel.

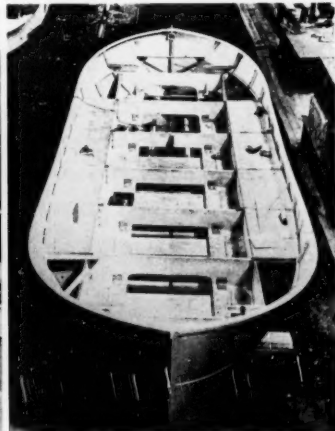
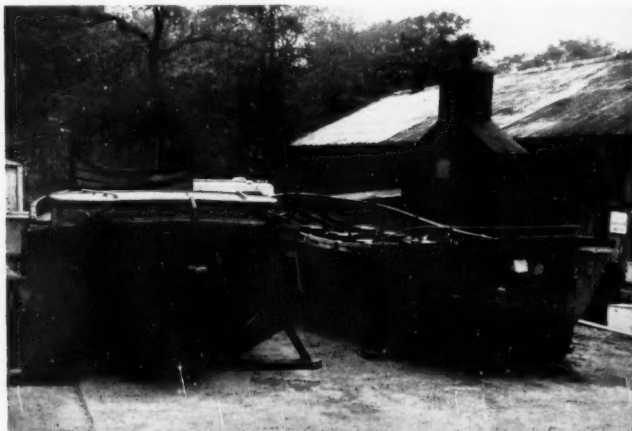
Wood, Steel or Aluminium

In so far as lifeboats are concerned at the present time, they are supplied of wood, steel or aluminium construction, the cheapest of which is the wooden boat. Before 1939 wood was used almost entirely for ships' boats except for some of the larger passenger ships which carried steel lifeboats. The aluminium boat was first developed during the 1930s and no lifeboats of this material were built during the war years, but since 1945 there has been a great increase in the proportion

of aluminium boats being supplied to British and foreign ships. The wooden boat is still the cheapest but maintenance charges are not inconsiderable due, to a certain extent, to the quality of the timber which is available today. It is not so easy to obtain the high-grade timber for lifeboat construction which was available before the war and, if relatively unseasoned timber is used, the charges for repairs can be quite heavy within a relatively short period. Moreover, lifeboats may be seldom in the water and the continued exposure to the sun, particularly in tropical climates, can cause shrinkage to such an extent that a wooden boat may not be seaworthy when it is launched. The advent of the steel lifeboat, and particularly of the welded steel lifeboat, was a major advance in that it ensured that a reasonably long life could be expected without undue charges being incurred for repairs; but, of course, these boats were considerably more expensive than the wooden boats.

First Aluminium Lifeboat

The first aluminium lifeboat was built in the early 1930s as an experimental venture and it was deliberately subjected to very severe corrosive conditions for 2½ years to discover whether this new material would stand up to the very high standards required for lifeboat construction. In fact, it has since been found that aluminium is a more suitable material than wood or steel in that it can safely be expected that a set of aluminium boats will last the life of a vessel without any other than normal repainting or local repairs due to damage. The last few years have seen an enormous increase in the number of aluminium boats supplied to ships and several firms have turned over to aluminium construction; in fact, at the present time further increase in output is only limited by the shortage of this material. The first prices were higher than for steel but now the price of an aluminium boat is approximately the same as that of a steel lifeboat and this has meant that the steel boat is being replaced, to a very large extent, by the aluminium boat. Furthermore, many owners are specifying the aluminium boat in place of wooden boats and are meeting the extra



Early examples of light alloy lifeboats. On the left are the "Awatea" lifeboat and "Barnacle Bill"; on the right is an early 99-passenger lifeboat in Birmabright

Monthly Light Alloys Section

first cost in the knowledge that, once fitted, there is little likelihood of expensive repairs after a few years.

The principal drawback to aluminium boats at the present time is the fact that welding has not yet been adopted for their construction. Riveted construction is perfectly satisfactory from the strength point of view, but if built-in buoyancy is required, it is much more difficult to secure airtightness of the buoyancy tanks with riveting and, as a result, several builders fit separate buoyancy tanks as in wooden boats. If the logical development of the metal boat is one with built-in buoyancy, it is time that this problem received attention and with the recent developments in argon-arc welding for aluminium, there would appear to be no reason why this cannot be successfully accomplished. It does mean, however, that the design of the boats should be tackled from the point of view of welded construction and the transition should not be merely one of substituting welded for riveted joints. This, and the multiplicity of lifeboat designs and sizes which are now available, are surely the main reasons for the present high costs and it would appear desirable to have standard designs with a limited number of sizes of boat so that the finished article could be sold to the ship-

builder at the cheapest possible price. This would also help to remove some of the difficulties which the davit manufacturer has to face as the numerous sizes of lifeboat now being manufactured mean that davits have to be modified to suit different makers' boats instead of being automatically available in standard sizes for standard types. When the 1948 Conference ruled that a boat fitted with an approved type of hand propelling gear could be considered as equivalent to a motorboat, this also left the field open for a reduction in costs, as there would appear to be no reason why a simple form of hand propulsion should not be developed at a much smaller cost than for a diesel engine.

To sum up, it can be said that the aluminium lifeboat looks like becoming the standard boat of the future, but before this can happen, welded construction will have to be developed and the design of boats will require to be standardised far more than it is today. These improvements and their consequent benefit to the davit manufacturer should, therefore, mean an all-round reduction in cost without reducing the efficiency of the equipment which, in British vessels at least, has always been maintained at the highest standards.

ALUMINIUM PROGRESS ABROAD

A REVIEW OF RECENT MARINE APPLICATIONS OF LIGHT ALLOYS

By a Special Correspondent

OVERSEAS news of recent applications of aluminium to the marine field continues to be diverse, ranging from components for outboard motors to new welding technique. News in the marine engine world comes from the U.S.A., where aluminium die castings are planned in the large-scale production of a 25 h.p. outboard motor developed by Evinrude Motors of Milwaukee. The motor is designed as a lightweight heavy-duty unit, weighing only 85 lb. yet developing 4,000 r.p.m. and intended for working heavy craft. Known as the "Big Twin", this new engine is a twin-cylinder model with an aluminium die-cast cylinder block. Iron sleeves are cast in place and the die-cast aluminium cylinder heads are detachable. For smoother operation the power unit is on rubber and steel springs. Two other recent developments in the U.S.A. concern an inboard motorboat manufactured by the Paragon Marine Construction Co., Chicago, which is simply stated to be "all-aluminium", and a "towboat tender" from the same company at Miami Beach. This latter craft is also all-aluminium and, weighing only 1,100 lb., is designed for ferry work, being carried on board the larger types of tug.

Australian Aluminium Dinghy

Small boats are also in the news in Australia, where Quantrell & Arnold (Ptd.), Ltd., of Sydney, are manufacturing the "Quintrex" dinghy. This firm has been making welded steel boats for the past five years and early in 1950 accepted an inland order for an aluminium craft. Considerable thought was given to fabrication methods with a view to quantity production. A welded dinghy was decided upon, of the pram type, 8 ft. long by 4 ft. beam and 16 in. in depth. The aluminium used is 16-gauge metal in NS4 alloy. A riveted air tank is incorporated at the bow for buoyancy, making the craft unsinkable and adding greatly to its strength. The dinghy weighs only 74 lb. but will carry four persons and may be propelled by an outboard motor. Demand for this craft is increasing, especially in inland districts where its no-maintenance qualities are appreciated. Quantrell & Arnold, pleased with the success of this boat, are now investigating the possibility of manufacturing larger craft.

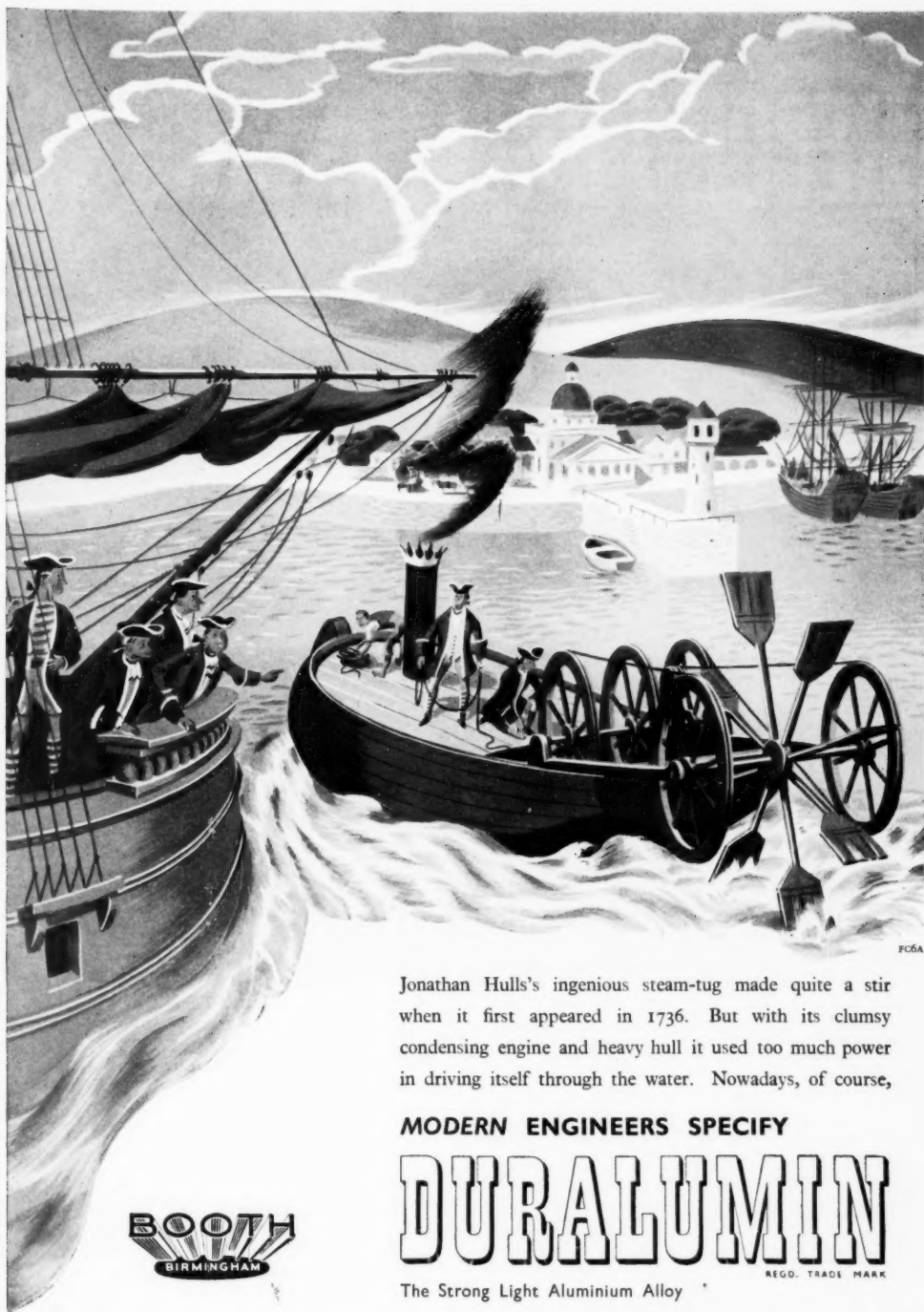
J. S. Doig (Grimsby), Ltd., has been using HE10-

type aluminium alloy sections extensively in a conversion job. The result is a floating shark-factory ship. Trawler owners in Halifax, Nova Scotia, are also leading the way in the use of the metal. National Sea Products have two vessels building at Lunenburg by Smith Rutland Co., Ltd., which will be the first Canadian-built trawlers to have aluminium fish holds. The two ships *Cape Fourchu* and *Cape Scatari* will also make extensive use of aluminium for their superstructures.

What are claimed to be the safest, fastest and largest double-ended ferries ever built are now running between Staten Island and Manhattan. The *Pet. Joseph F. Merrell*, *Cornelius G. Kolff* and *Giovanni de Verrazano* have been built by the Bethlehem Steel Company at Staten Island at a cost of \$2,151,000 each for the New York City's Department of Marine and Aviation. Each with a displacement of 2,350 tons on an overall length of 290 ft., beam of 69 ft. and midship depth of 20 ft. 10 in., these vessels will carry 3,000 passengers on three decks as well as from 38 to 45 vehicles. It is estimated that all three ships will be able to carry 30,000,000 passengers a year. Over 90 tons of aluminium alloy has been used in the superstructure of each vessel. Deckhouses and cabins, funnels and masts and much interior work have been carried out in the metal. Service speed is about 16 knots, propulsion being provided by 6-cylinder Skinner Uniflow steam engines giving 4,000 h.p. at 170 r.p.m. Three oil-burning Babcock & Wilcox watertube boilers (one in reserve) furnish superheated steam at 300 lb. pressure.

U.S. Navy Patrol Vessels

The U.S. Navy has stated that it is "looking for a practical aluminium hull" and has had four patrol boats built to varying designs. The first is a 94-ft. craft built by John Trumpy & Sons at Annapolis. A 98-footer has been built by the Electric Boat Co., at Groton, Conn., an 89-ft. vessel by the Bath Iron Works Corporation at Bath and a 105-ft. boat at the Philadelphia Navy Yard. All four boats approximate to the standard 75-tons displacement, but all have different hull forms, hull structure and machinery arrangement. The Trumpy-built boat is the first all-aluminium patrol boat in the U.S. Navy and it is



Jonathan Hulls's ingenious steam-tug made quite a stir when it first appeared in 1736. But with its clumsy condensing engine and heavy hull it used too much power in driving itself through the water. Nowadays, of course,

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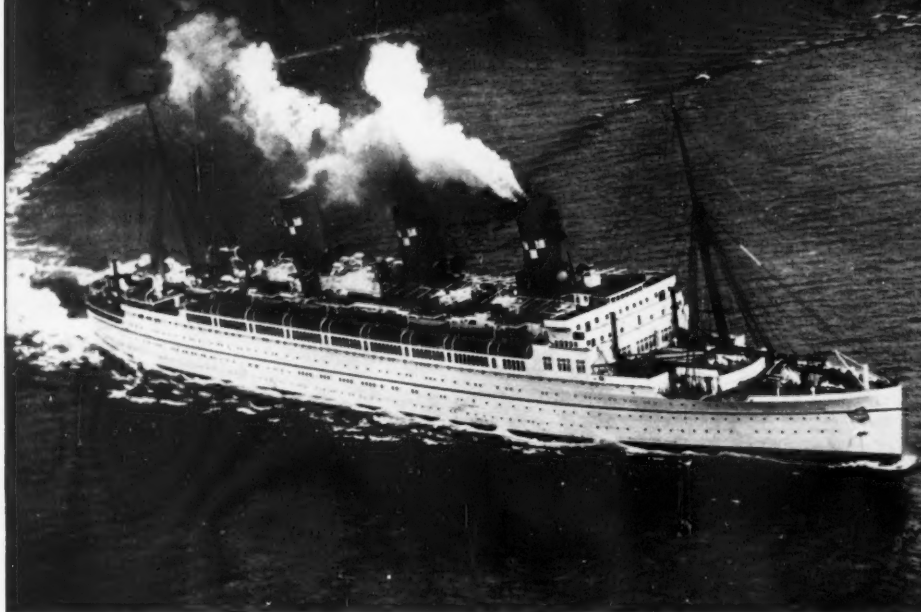
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RECORD-BREAKING RUNS



—with I.C.I. Cupro-Nickel Condenser Tubes

The 26,000 ton Canadian Pacific liner "Empress of Scotland" has created new records for the trans-Atlantic crossing. Timed from Cumbræ, Scotland, she reached Cock Point, Quebec, in 5 days 36 minutes. On a subsequent voyage she took only 6 minutes more for the homeward run—another record. Formerly the "Empress of Japan", the vessel has recently undergone extensive

reconditioning by her builders, the Fairfield Shipbuilding and Engineering Co. Ltd. After years of war service she now takes her place as the largest member of the Canadian Pacific fleet.

The "Empress of Scotland" is fitted throughout with cupro-nickel condenser tubes supplied by the Metals Division of I.C.I.

IMPERIAL CHEMICAL INDUSTRIES LTD., LONDON, S.W.1.



Monthly Light Alloys Section

also the first metal boat produced at this yard. Extensive tests are being carried out, including X-ray testing of welded joints, and as a result a prototype aluminium patrol vessel will emerge.

The New York Naval Ship Yard at Brooklyn has recently announced that it has found it possible successfully to weld aluminium sheet under a process developed by Air Reduction Laboratories, Murray Hill, N.J. The electric arc which bonds the metal is helium-gas shielded, this excluding oxygen and any possible formation of aluminium oxide. The advantage over other gas shielded methods is in the fact that aluminium filler wire is fed on to the seam simultaneously with the helium. X-ray inspections are said to show that the resultant seams are twice as strong as is usual for aluminium welding. This last claim might be treated with some reserve, as this is, in fact, the Airomatic method of welding, fully described in *THE SHIPPING WORLD* of March 7, 1951, which although undoubtedly the greatest advance yet made in shipyard welding technique, hardly justifies such a statement.

Extrusions in "Hiduminium"

New Handbook by High Duty Alloys, Ltd.

THERE was a time, and it is not so long past, when the catalogues, brochures and handbooks published by firms for the guidance of their customers, both current and prospective, formed easily the dullest and worst produced books in a market where there was considerable competition for that doubtful honour. Those days are gone, and the standard of production of these important publications has reached a new high level in Great Britain. The use of colour to give both greater clarity and improved appearance, proper layout, adequate illustrations, and typography planned by experts, have revolutionised the appearance of trade handbooks, with no small benefit to the firms concerned, not least in overseas markets.

The recent brochure *Extrusions in Hiduminium*, published by High Duty Alloys, Ltd., stands out as a high achievement in production which may well set the pace for similar books in future years. Its declared purpose, which is to set out the types of extrusions and drawings manufactured by the company, is, of course, well fulfilled, but there is much more to the book than this. To mention one feature which will be of great service, the book contains in a pocket on the inside of the front cover two folding charts giving specified properties of aluminium bars, rods, and sections, and aluminium alloy tubes. The alloy specifications are given in tables from which identification according to the general engineering British Standard, BS.1471, aircraft, or the BSSTA7 schedule is easily possible. In addition, however, separate tables giving the nomenclature used for these alloys by seven aluminium-producing firms, including High Duty Alloys, are also given. It is sometimes overlooked that while those engaged in the aluminium industry are familiar with the wealth of symbols used, their customers, who may be building ships or engines or anything from greenhouses to aircraft may not always be so sure of their ground.

Problems of Identification

For example, it is fairly certain that the average shipbuilder, who may—or may not—be enthusiastic about the claims of aluminium will not be aware that, as shown in the chart, the material NT4, AW4B, Hiduminium 22, Noral M37S, BA21, BB2, Kynal M35/1, MG2, and Alcoa 32S all refer to aluminium with a 2 per cent magnesium content. Certain of the firms' symbols mentioned, the user will, of course, know, because of the length of time which those companies have been working in the marine field, but there are others perhaps of importance to him which are not so well known. The writer of this review would go so far as saying that the present confusion as to what is meant by the plethora of identifications is one of the most serious present drawbacks to the wider development of aluminium alloys for ships and engines. If a criticism may be made of the High Duty chart it is that at least one large firm of aluminium alloy producers seems to be omitted, making the comparison incomplete.

In a brief history of the extrusion process it is mentioned that the earliest record is a patent granted in 1797 to Joseph Bramah covering a press used in making pipes of lead or other soft metal of all dimensions and of any given length without joints. This was a hand-operated press, but the

process was further developed by the introduction of a hydraulic press with ram-attached mandrel by Thomas Burr in 1820. In 1837, J. and C. Hanson introduced a simple type of bridge mandrel. It was not until 1894, however, that Alexander Dick obtained a patent for the extrusion of copper alloys which really formed the basis for the extrusion process known today. The extrusion processes now used vary considerably in detail, but are identical in principle, the machinery consisting of a die, a pressure cylinder, the ram, and a container which receives the unheated ingot or billet to be extruded. The temperature of preheat varies with the alloy to be used but usually lies within the range 380 to 500 deg. C. In order to preserve a homogeneous structure of material and avoid oxide inclusions, the end of the billet is not extruded, but is cut off to form the "discard."

Tubes are made either with a floating mandrel attached to the pressure plate at the end of the ram or with a mandrel attached to a bridge, over which the metal is extruded. Certain alloys require heat treatment to realise the full mechanical properties, full heat treatment consisting of solution treatment after precipitation treatment. It is also necessary to soften the metal by annealing, the section being heated to from 320 to 420 deg. C., and allowed to cool slowly. A well balanced section will emerge from the extrusion process in a reasonably straight condition but these sections are sometimes distorted in the heat treatment process. To correct this distortion the section is mounted in a stretching machine which removes any kinks.

Physical Properties of Sections

It is stressed in this book that there are great advantages attaching to well balanced sections, the life of the extrusion die being relatively short where there are long tongues in the die; illustrations are given showing how with slight modifications improved sections can be obtained. The book also gives data on the physical properties of sections of various standard types and beam formulae under the conditions normally found in engineering. Tables for standard round bar sections are given for bars up to 10 in. diameter, and for hexagonal bars up to 2.760 in. across the flat, square bars up to 4 in., rectangular bars up to 5 in. by 8 in., equal angles up to 7 by 7 by .75 in., unequal bars up to 8 by 4 by .625 in., channels up to 8 (web) by 3½ by ½ (web) by 9/16 in., I beams up to 8 by 5 by 7/16 (web) by ½ in., equal tees up to 6 by 6 by ½ in., and unequal tees up to 4 by 6 by ½ in. Tubes can be extruded up to 7-in. external diameter and ½-in. thickness and can be drawn up to 4-in. external diameter and 10 gauge or 0.128-in. thickness. The wide range of miscellaneous extruded sections manufactured by the company is also described and illustrated in a special section; many of these have special applications to shipbuilding and marine engineering. The book is completed by tables of tolerances and conversions and a comprehensive index with a pictorial reference which is most useful.

A New Light Alloy Treadplate

A new type of treadplate, for use in engineroom floorings, deckhouses, wheelhouses, companion ways and other ship and land applications has recently been introduced by Birmetals, Ltd. Known as the "Hobnail" pattern the treadplate consists of plate of the maker's B.B.016 alloy in the quenched (W) or quenched and aged (WP) condition. The former type is required where the treadplates are to be bent, as for example when used for stair treads. The plate can be supplied in a base thickness of 3/16 in. or above in standard sized panels of 6 ft. by 3 ft. The normal thickness is ½ in. and it may be noted that panels of different size can be provided to meet special needs. The 6 ft. by 3 ft. panel with a base thickness of ½ in. can sustain a safe uniformly distributed load of 87 lb. per sq. ft. with simple supports on all four sides; with fixed plates this is increased to about 130 lb. per sq. ft., the safe load in both cases including the weight of the plate itself. Hobbs are formed by eight raised studs of special pan-head shape formed into a diamond pattern, with intermediate studs between the diamonds. The studs are of course integral with the plate but it is important to note that where abnormal wear takes place, the grip pattern can be replaced by inserting pan-head rivets of the appropriate size. The spacing of the pattern has been calculated to give adequate grip to the feet, while there are no enclosed spaces, so that the whole surface can be cleaned by normal methods. A further advantage, particularly for marine applications, is that flat areas can easily be made to enable fittings to be fixed in position, merely by chipping away the pattern in the vicinity. The non-magnetic properties are of great service in wheelhouses, while the non-sparking properties make these treadplates suitable for use in oil tanker pump rooms, and on fore and aft gangways.

DANISH SHIPPING AND SHIPBUILDING

THE FREIGHT INDEX AND SHIPPING EARNINGS

By THE SHIPPING WORLD'S Own Correspondent

THE managing director of the Danish Steamship Owners' Association, reviewing the state of the Danish shipping industry in 1950, said that the freight market in that year had experienced considerably greater fluctuations than in the previous postwar years. During the first half of the year there had been a downward tendency and the laying up of smaller tonnage had been considered in Denmark as in the other northern countries. The second half of the year, however, brought a rise in the tramp freight rates which in the beginning was small and limited to certain overseas trades, but which towards the end of the year grew considerably and also affected home trades. In spite of the rise in the freight rates, the net profit of the Danish shipping industry did not differ from that of 1949.

The statistical department's freight index and various other freight index figures had no doubt created exaggerated ideas of the earnings of the shipping industry in certain circles of the community. The freight index in reality only affected about one-quarter of the Danish merchant fleet, as it was based on the rates for prompt tramp tonnage. More than half the fleet was employed in liner trades and 20 per cent consists of tankers, which in most cases were fixed on charter contracts covering several years. Only in a few cases had liner rates been increased since 1946, and then not in comparison with the rise in costs. This rise in costs had resulted in several shipping companies having worse results than during 1949. Strikes and poor dispatch conditions in a number of countries had attributed to this as well as the political situation.

Flag Discrimination

Director Maegaard then went on to the subject of discrimination and said that the American decision that 50 per cent of all Marshall Aid goods should be carried in American vessels could not be objected to so long as it covered gifts or cheap loans. Bad examples, however, were quickly copied and the practice had already spread to South American countries and the new Asiatic countries. For Danish shipping which did not, and did not wish to, receive subsidies of any kind, but must compete with other countries' State-subsidised ships, it would only be possible to do so through quality in ships and crews. Owners must also in the future use most of their profits in modernising and renewing their fleets if the Danish merchant fleet was to hold its position as the country's most pronounced export agency. The shipping industry brought the country earnings from abroad and had little influence on the internal price level, and its resources should therefore not be requisitioned by the State for other purposes, however praiseworthy these may be. It was in any case more important that this industry's ability to compete should be strengthened.

Strength of the Fleet

At the end of 1950 the Danish merchant fleet consisted of 551 vessels totalling 1,220,000 tons gross. Of this total 41.6 per cent was under 5 years old, 12.9 per cent was 6-10 years old, 10.1 per cent was 11-15 years old, 8.1 per cent was 16-20 years old, 7.8 per cent was 21-25 years old and 19.5 per cent was over 25 years old. The age position of the fleet was less favourable than before the war and although the fleet was larger its reconstruction could not be considered complete. By the end of 1950 59 new vessels totalling 318,000 tons gross were on order. Of these 32 vessels totalling 147,000 tons were due for delivery in 1951, 14 vessels totalling 84,000 tons in 1952, 10 vessels totalling 65,000 tons in 1953 and three vessels totalling 22,000 tons in

1954. During the first half of this year 20 vessels totalling 116,000 tons have been ordered, so that vessels presently on order total 370,000 tons gross. The gross earnings for 1950 were kr. 780 million, compared with kr. 658 million in 1949. This was due not to the rise in freight rates but partly to the fact that the fleet was 8 per cent larger and partly to the fact that owing to the devaluation dollar freights brought in more kroner. The net earnings had only risen from kr. 367.2 mn., to kr. 408 mn., as expenditure had risen by 21.4 per cent against an 18.2 per cent increase in earnings. Since 1946 the margin between earnings and expenditure per ton deadweight has steadily diminished.

Traffic in all Danish ports during March amounted to 5,772 vessels totalling 1,387,000 tons net. Goods discharged totalling 1,073,000 and 462,000 tons were loaded. The corresponding figures for March 1950 were 6,329 vessels totalling 1,489,000 tons and goods discharged and loaded 1,368,000 tons and 437,000 tons respectively. The leading port was Copenhagen with 1,402 vessels totalling 604,373 tons. Thereafter followed Aalborg/Norresundby (475 vessels, 155,502 tons), and Aarhus (304 vessels, 120,539 tons). Traffic in all Danish ports during April this year amounted to 6,400 vessels, totalling 1,584,000 tons net. Goods discharged were 1,267,000 tons, and 497,000 tons were loaded.

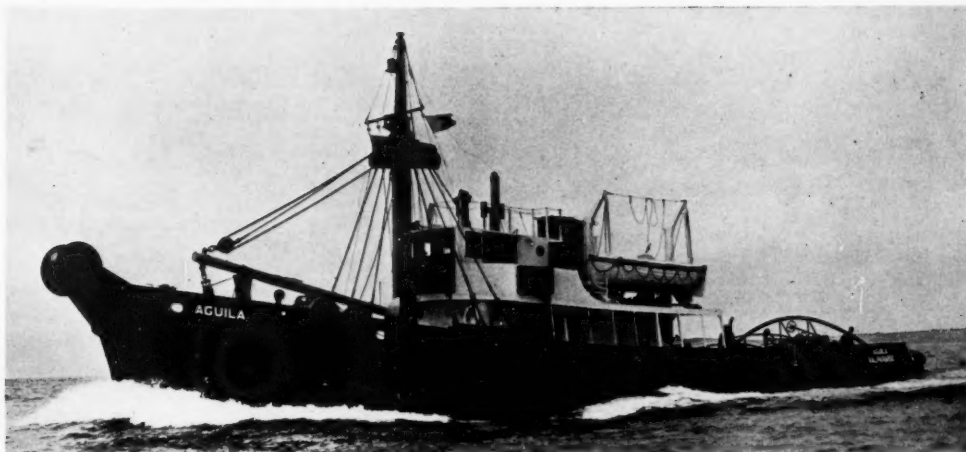
Sales and Purchases

During the first quarter the Danish fleet was increased by four new cargo vessels totalling about 50,000 tons deadweight and the Great Belt ferry *Dronning Ingrid*, of 3,000 tons gross. Four vessels, totalling about 1,500 tons d.w., were bought from abroad. During the same period the motor vessels *Benny Skou* and *Marchen Mærsk* and the steamers *Rigmor*, *Aslaug*, *Taarnholm* and *Freja* were sold abroad. The steamer *Danvig*, of 3,340 tons d.w., and built at Fredrikstad in 1941, has been sold by the Steamship Company Dania to Finland for £270,000. The company bought the vessel from Sweden in 1948 when she was named *Lali*.

Det Dansk-Franske Dampskibsselskab (A. N. Petersen), of Copenhagen, has ordered two new ships at the Elsinore shipyard. Each vessel will be of about 6,200 tons d.w. and will have about 17,500 cu. ft. of refrigerated space and a deep tank for vegetable oil. The vessels are to be employed in the owner's trade to West Africa. The engines will be 8-cyl. Burmeister & Wain diesels of 5,400 h.p. to give a speed of 15½ knots. The vessels are expected to be delivered during the last half of 1953.

Marshall Aid Funds

The first Danish ship to be built out of funds supplied by Marshall Aid for the rebuilding of the Danish coaster fleet was launched on July 11 at Holbæk Skibs-og Badbyggeri. She is a motor vessel built of wood and is of about 1,000 tons. She is building for Capt. Hyrup Nielsen and has been named *May Britt*. The next Marshall Aid ship is expected to be launched in the near future at Marstal. On June 28 a 3,800-ton d.w. vessel on order at the Elsinore shipyard for Det Danske Kulkompagni (Danish Coal Company) was launched and named *Th. Adler Scandholm*. Her dimensions are 299 ft. by 44 ft. 6 in. by 21 ft. 6 in. Her draught is 19 ft. 6 in. The vessel has a raised quarter-deck and the engine is placed aft. She is a self-trimmer with large hatches. All the crew will have single cabins and there will be large messes both for the officers and for the deck and engineroom staff. The main engines will consist of a 3-cyl. Elsinore turbo-compound with an exhaust steam turbine producing 1,800 i.h.p. at 115 r.p.m. and giving the vessel a loaded speed of 12 knots.



TUG AND WATER VESSEL "AGUILA"

DARTMOUTH-BUILT MOTORSHIP FOR SERVICE IN VALPARAISO

THE *Aguila*, a single-screw tug and water vessel, has left Great Britain for Chile under her own power. Built by Philip & Son, Ltd., Dartmouth, for the Compañia Sud-Americana de Vapores, she is intended for service in Valparaíso harbour. The voyage from Dartmouth to Valparaíso, a distance of about 2,700 miles, is expected to take 40 days, the first port of call being Aruba. In command of the *Aguila* is Capt. W. A. Hearle, who was for 35 years with the Pacific Steam Navigation Company and whose last command was that of the *Reina del Pacifico*, a contrast in size from that of the *Aguila*, a vessel of 234 tons gross.

Of special design for handling buoys and mooring chains in harbour and supplying vessels with fresh water, the *Aguila* is built of steel to Lloyd's Register special survey and is classed 100A "for harbour service." The vessel was constructed under the supervision of the company's technical adviser and London manager, Mr. N. E. Thompson.

The principal dimensions of the *Aguila* are:—

Length	110 ft.
Breadth moulded	25 ft.
Depth moulded	12 ft. 3 in.

Auxiliary Machinery

The windlass and after warping winch of the *Aguila* are both electrically operated. Arranged forward, the winch windlass can handle a load of 20 tons of mooring cable over the bow roller. This windlass also serves a derrick which can handle buoys of up to ten tons in weight. The 3-ton winch fitted aft is for handling ships' mooring ropes in harbour. Two towhooks, each of 10 tons capacity, are fitted amidships. An electrically driven fire and salvage pump is installed which has a capacity of 100 tons per hour against 100 lb. per sq. in. for fire duty and 130 tons per hour against 50 ft. head for salvage purposes.

Fresh water tanks are fitted forward and aft of the machinery space having a total capacity of 160 tons. This water can be transferred to other vessels by means of an electrically driven pump having a capacity of 100 tons per hour.

The deckhouse amidships accommodates the mess-room and galley, which is fitted with an oil-fired range. The washplaces and W.C.s for the officers and crew are also situated in the deckhouse and are supplied with hot water from the galley range. Accommodation for

the master is fitted abaft the wheelhouse, in which is installed a Marconi radio for the voyage to Chile.

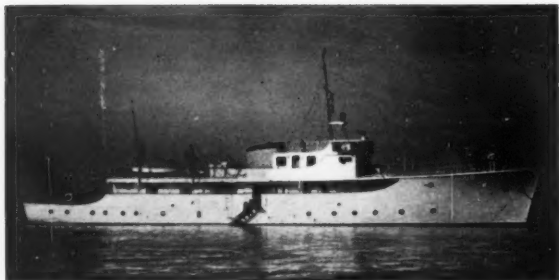
A speed on trials of 10.724 knots was attained with a British Polar type M44M diesel engine. Supplied by British Polar Engines, Ltd., this engine is a 3-cylinder unit of the two-stroke single-acting type, developing 680 h.p. at 260 r.p.m. To take the heavy electrical load, two 70-kW 22-volts D.C. generators are installed, each driven by a British Polar diesel engine developing 110 h.p. A Crossley 30-h.p. diesel auxiliary drives a 6-kW 220-volts generator, a 28 cu. ft. per minute air compressor and a 40-tons per hour general service pump. Both main and auxiliary engines are fresh water cooled, the water being circulated by engine driven pumps. Sea water circulation through the heat exchangers is by independent electrically driven pumps. The fuel transfer pump is also electrically operated.

Repowering of American Tug

A report recently received from the owners of the American tug *Confederate* speaks highly of the performance of the British engine with which the vessel was repowered last summer. The tug resumed its work of towing fully loaded oil barges up the fast-flowing James River between Norfolk and Richmond, in Virginia, last autumn after a 320 h.p. Lister-Blackstone (EPVMDR8) oil engine had been installed by the Curtis Marine Co., Inc., of Norfolk. Since then and operating under the same load and same conditions, the *Confederate* has shown a 20 per cent increase in speed, giving an average of 11 knots. This is equivalent to an additional round trip per week on her regular run. This is a significant increase in the annual earning power of the vessel, even discounting entirely the reduction in maintenance costs with a new engine.

Previously the *Confederate*, a 23-years old vessel, had been powered by a 280 h.p. diesel engine but competition in tug traffic had made it difficult to carry on with an engine that required constant maintenance to ensure sound service. Repowering was regarded as the only solution and the Lister-Blackstone unit was selected after a careful study of current and potential service needs. The *Confederate* is owned by Lynch Brothers, of Norfolk, Virginia.

THE American ship *Ferdinand R. Hassler* has brought a cargo of 10,000 tons of iron ore to the Tyne from Bizerta. This is the first of several U.S. ships expected in the Tyne with ore cargoes.



Left: The motor yacht "Calisto" after conversion

Right: The yacht minesweeper before conversion to the "Calisto"



MINESWEEPER CONVERTED INTO YACHT

DETAILS OF AN INTERESTING CONVERSION BY VOSPER

ONE OF the most interesting yacht conversions since the war has been carried out in the Portsmouth shipyard of Vosper, Ltd. The motor yacht *Calisto* has been converted from one of the well-known B.Y.M.S. class (British yacht minesweeper) wooden vessels built in the United States during the war, of heavy timber construction and powered by two General Motors 8-268A diesel engines rated at 500 h.p. each. The vessels have a length overall of 134 ft., a beam moulded of 24 ft. and a draught of 8 ft. 6 in.

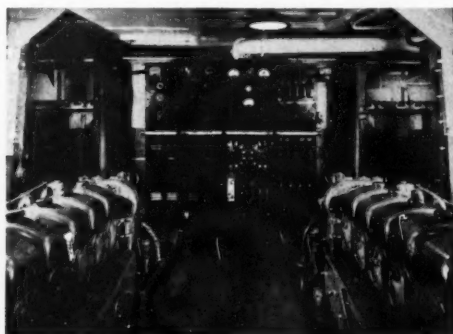
To strengthen the vessels against the shock of an adjacent underwater explosion the structural scheme incorporated a system of comprehensive beam knees, which would have become rather an embarrassment in the accommodation of a yacht. For this reason, and because the overall strength was obviously in excess of what would be required in a yacht, a considerable number of these beam knees were removed, resulting in much improved space in the owner's accommodation. To assist in the fitting of opening scuttles and deadlights, the closely spaced timbers had to be cut at suitable intervals, which again was not considered to be likely to impair the strength unduly.

In the minesweepers as originally constructed, a large space approximately equal to the main engine room was occupied by the generator room. This generator room is redundant in the case of a yacht, so that it has been used for the stowage of fuel and water. There are 55 tons of fuel contained in eight tanks, and 29 tons of fresh water in eight tanks. At the forward end of this compartment are located the Sperry gyro compass, as well as a number of motor generators, converters, power packs, etc., for the various electrical devices which are fitted. Here also is located the steering motor and its control gear, which is also of Sperry manufacture.

In the engine room are two General Motors diesel generators of 20-kW capacity, one, also driving through a clutch an air compressor, and the other a "Mono" type bilge pump. Also fitted are a "Nife" nickel cadmium battery of 500 ampere-hours capacity, an electrically driven air compressor with automatic cut-in and out, an electrically driven bilge pump and an oil-fired boiler for heating domestic fresh water and the space heating system which is fitted throughout the ship. The fresh water system is fed from a pressure



Inside the chartroom



Main engines and switchboard

tank pumped by a Megator electric pump which is automatically cut in and out by a pressure controlled switch.

The aft accommodation was formed by removal of the sweep reel and its well. To some extent to improve appearance the bulwarks aft were cut away and their place was taken by rails with teak capping. A steel deckhouse was constructed to incorporate dining and day saloons. Access to aft accommodation is incorporated into this deck structure. The new deck structure at its forward end merges into the existing structure, which includes galley and pantry, messroom, as well as cabins and accommodation for many of the senior members of the crew.

Above the deck structures is an extension to the charthouse which blends in to the forward end of the funnel. The wheelhouse and charthouse, which also forms a sea cabin for the owner, who commands and navigates his own ship, are fitted with all the modern aids to navigation such as Decca radar, Bendix radio compass, Sperry automatic pilot, Submarine Signal echo sounder, Marconi "Seagull" R/T equipment, Chernikef patent log, as well as Walker's electric repeat log.

Particular care was exercised to avoid the noise or vibration usually associated with relatively fast running diesel engines. The speed on trials at full load indicated a continuous cruising speed at a conservative rating of the machinery in the neighbourhood of 12 knots, while a speed approaching 15 knots was possible at the full rating of the engines.

New Expeller for Fish Oil

A new leaflet (No. 47A) issued by Rose, Down & Thompson, Ltd., Old Foundry, Hull, describes the GX expeller, which was originally designed to treat grax or residue from whale blubber boilers. This has now been developed for use in other fields, in particular the fish oil and meal industries. As this expeller occupies less space than drying equipment of the same capacity, it is claimed to be particularly suitable for factory trawlers. It has proved to be efficient in the pre-drying or de-watering of whale meat and has been used with success in the whaling factory ships *Southern Venturer*, *Southern Harvester* and *Balaena*, and a number have been installed in the *Juan Peron*. The raw material is continuously and automatically compressed by double screws in two successive cages: the increasing volume reduction expresses the bulk of the liquors through perforations in the cage walls. The liquors are collected in a trough at the base while the solids go out of the cages to a chute passing through the base. With most materials the GX expeller is capable of handling about 72 tons per day, requiring from 10 to 15 h.p. according to the material under treatment.

Destroyer in Film Role

THE former destroyer *Leamington* (ex-U.S.S. *Twiggs*) is playing the leading role in a film called "The Gift Horse," based on the combined operational raid on the port of St. Nazaire in 1942. H.M.S. *Leamington* was lying at Rosyth about to be broken up when the producer approached the Admiralty with the idea of using her in his film. Orders were given for breaking-up operations to cease and she was towed to the yard of R. S. Hayes, Ltd., of Pembroke Dock, to be reconditioned and converted for her screen role. This has involved the removal of two of the funnels, cleaning, reconditioning the hull and placing the geared turbine machinery in order so that the ship can steam at about 16 knots on two of her four boilers. Also the ship has been so conditioned that her lifesaving appliances meet the requirements of the Ministry of Transport. The refit was carried out under the supervision of Hardy, Tobin & Co., Ltd. On the completion of the film she will return to the breakers' yard.

SMITH'S DOCK CO., LTD., North Shields, has received the small tanker *Rebecca* for conversion into a gas-carrying ship. Gas cylinders 20 ft. high and 10 ft. wide will be installed in the ship's oil tanks for carrying propane gas. The *Rebecca* belongs to the Dutch fleet of the Shell organisation.

ROUND THE SHIPYARDS

Work in Progress in Scotland

By THE SHIPPING WORLD'S Own Correspondent

THE inability to give fast enough delivery is now becoming a factor in limiting the placing of fresh business in Scottish yards. At the launching of the 16,500-tons d.w. tanker *Thorskog* for A/S Thor Dahl, of Sandefjord, Norway, from the Greenock Dockyard on July 19, Consul Lars Christensen, chairman of the owners, indicated that it had been impossible to enter into a further contract with the Greenock yard because of the delivery problem. He anticipated returning at a later date to the yard, which has three more tankers of 16,500 tons to complete along with other business. This problem of delivery may well be a factor in sending tanker business outside Britain, although even yet there are indications that some owners are prepared to wait the necessary time to secure what they want. The Fairfield yard at Govan has booked an 18,000 tons d.w. tanker for the Intercontinent Tanker Corporation.

Another problem referred to at this launch, and of increasing importance to owners and builders, is the steel position. Mr. George Morrison, chairman of the Greenock Dockyard Co., Ltd., emphasised that foreign competition—including German and Japanese competition—would demand that the Government allocate enough steel to the shipbuilding industry to allow completion of work on hand and adequate competition with foreign interests. Much of the tanker work is for export—which should give priority. An Aberdeen M.P. recently raised the matter, and a Treasury promise guarantees that a system of provisional estimating will ensure that work is maintained and not hampered by lack of small but vital supplies of metal. There are hopes, therefore, that shipbuilding can be maintained at full pressure without hindrance for lack of supplies.

New Vessels Launched

Meanwhile, Clyde yards have been active, using the holiday break to carry through a number of launches. John Brown & Co., Ltd., launched the *Clan Macintosh* for the Clan Line. This is of interest as being the first Clan Line vessel to be handled by a yard other than the Greenock Dockyard for more than 25 years. William Denny & Bros., Ltd., launched the *Normanna* for the Southern Region of British Railways.

An exhibition of British Standards Institution work in Glasgow attracted many shipping men. There is a prospect that a Scottish office may be created to carry out standardisation work in the industries particularly represented in the main Scottish areas. No final plan has yet been prepared and the decision will depend on the extent of support shown by Scottish interests.

A Useful Visit

A pleasant experience in the past month was the visit of a large number of International Conference of Naval Architects and Marine Engineers delegates. Representing the major shipbuilding countries of the world, the visiting delegates were given an interesting and pleasant three days in Scotland before going to Newcastle. Yard visits were of particular interest and a number of very useful contacts were made. The visit to the Engineering Centre in Glasgow and the several civic and social functions arranged in that city all gave the guests a happy impression of Scotland. The Institution of Engineers and Shipbuilders in Scotland is to be congratulated on the excellence and smoothness of the arrangements made for this occasion.

Holidays continue on the Clyde until mid-August, by which time the last of the yards will have returned to work for another six months. Staggering of holidays by groups is one of the non-controversial arrangements which appear to have been accepted and to be permanent. It permits shipyard and allied workers to enjoy a holiday without the intense turmoil associated with the older Glasgow Fair, when an overall closure was the rule.

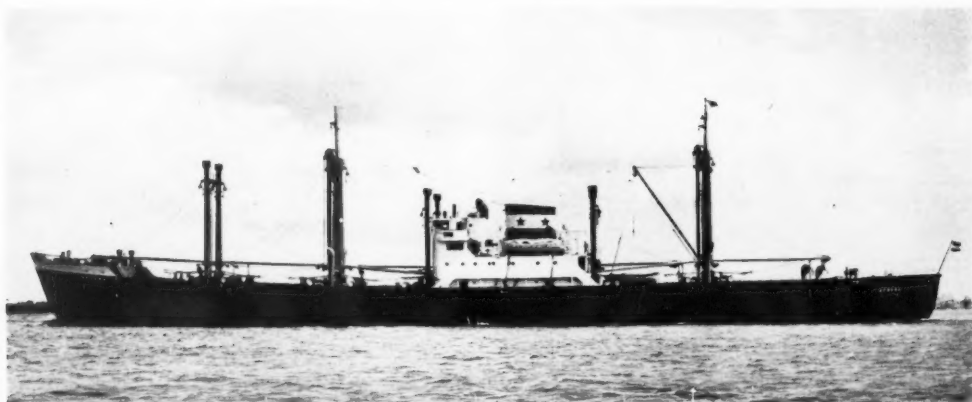


Passenger Motorship "Hamaroy"

Delivery has taken place of the single-screw passenger and cargo motorship *Hamaroy*, built by Trosvik Verktsted A.S. Brevik. Ordered by Saltens Dampskipsselskab, of Bodo, she has dimensions of 135 ft. length o.a., 120 ft. b.p., 23 ft. breadth moulded and 11 ft. 2 in. depth moulded, and is of 399 tons gross. A total of 250 passengers can be carried, there being berth accommodation for 35 passengers in one class cabins. A number of passengers can be berthed in the saloons. The capacity of the cargo holds is 100 tons. The propelling machinery comprises a 4-cylinder Wichmann diesel engine, type 4X, which develops 600 i.h.p. at 325 r.p.m. A KaMeWa propeller is fitted and fully controlled from the navigating bridge. A speed of 12.1 knots was attained on the technical trials.

Research Trawler "Cape St. Mary"

The diesel-driven research trawler *Cape St. Mary* has been completed by Hall, Russell & Co., Ltd., for the Crown Agents for the Colonies. Of 220 tons gross, the *Cape St. Mary* is designed for service at Sierra Leone. She has dimensions of 117 ft. length o.a., 25 ft. breadth moulded and 12 ft. 6 in. depth moulded. The fishroom of the vessel is cooled by a Freon plant fitted in the engine room, and is insulated with "Onazote" sheathed with aluminium alloy. There are two laboratories. The propelling machinery consists of a 7-cylinder four-stroke single-acting National diesel coupled through S.L.M. reverse reduction gearing to the propeller shafting. The engine develops 350 s.h.p. at 550 r.p.m. A fuller illustrated description of the *Cape St. Mary* was given in THE SHIPPING WORLD of April 25, 1951.



Cargo Motorship "Apsara" for France

Of 4,275 tons gross, the single-screw cargo motorship *Apsara* has been delivered to the Cie. Maritime des Chargeurs Reunis, Paris, by C. Van der Giessen & Zonen's Scheepswerven, Krimpen a d IJssel. Originally ordered by the Cie. de Transports Oceaniques, Paris, and launched as the *Tahoro*, the vessel was renamed after delivery, on her transfer to her new owners. She has a deadweight capacity of 7,750 metric tons on a summer draught of 24 ft. 9½ in., and is of 380 ft. length b.p., 56 ft. breadth moulded, 36 ft. 11 in. depth to shelter deck and 26 ft. 11 in. depth to main deck. Supplied by Sulzer Brothers, Ltd., of Winterthur, the main engine consists of a 6-cylinder diesel engine of the two-stroke single-acting type, developing 4,200 b.h.p. at 125 r.p.m. On trials the ships attained a speed of over 14½ knots in loaded condition with the engine developing 85 per cent of normal full load.

NEW CONTRACTS

Yards in Great Britain and Northern Ireland

Shipowners	No. of Ships	Type	Approximate Tonnages		Dimensions (ft.)	Speed (knots)	Propelling Machinery	Total h.p.	Engine Builders	Shipbuilders
			Gross	Deadweight						
Intercontinent Tanker Corp.	1	Tanker	—	18,000	—	—	Diesel	—	—	Fairfield S.B.
Mersey Docks & Harbour Board	1	Pilot tender	—	—	165 (long)	13	Sin.-scr., 6-cyl., 4-str. diesel-electric	900	General Electric Co. and National Gas & Oil Engine Co.	Philip & Son
Barker Bros. (Liverpool)	1	Coaster	—	325	—	—	Diesel	—	—	W. J. Yarwood & Sons
Rodney S.S. Co.	1	Cargo	—	5,500	—	—	Sin.-scr., Sulzer diesel	2,000	—	Henry Robb
A. F. Henry & MacGregor	1	Cargo	—	2,250	—	—	Sin.-scr., 8-cyl. British Polar diesel	1,280	—	Henry Robb
A. F. Henry & MacGregor	1	Cargo	—	990	—	—	Sin.-scr., 4-cyl. British Polar diesel	640	—	Henry Robb
Fomentador Cia. Naviera S.A., Panama	2	Cargo	—	10,500 (each)	—	—	B. & W. diesel	5,500 (each)	John G. Kincaid	Burntisland S.B.
Tramp Chartering Corp., Panama	1	Cargo	—	10,500	—	—	B. & W. diesel	5,500	John G. Kincaid	Burntisland S.B.
Commonwealth and Foreign Yards										
Harry Borthen & Co. A.S. Oslo	1	Tanker	—	18,000	—	14.5-15	Doxford diesel	—	—	Naval Dockyard, Horten
Gulf Oil Corp.	1	Coastal tanker	—	18,000	551 68 37.5	15.5	Sin.-scr., double-geared turbine	7,000	—	Bethlehem Sparrows Point Shipyard, Md.
Afran Transport Co.	3	Tankers	—	28,000	—	—	—	—	—	Bethlehem Steel Co., Quincy, Mass.
Rio Venturado Cia. Naviera, Panama	2	Tankers	—	29,300	—	—	—	—	—	Bethlehem Steel Co., Quincy, Mass.
N.V. Spoorhout, The Hague	1	Coaster	—	550	—	—	de Industrie diesel	400	—	N.V. Scheeps., "De Hoop," Lobith
New Zealand owners	1	Coaster	—	480	—	—	M.A.N. diesel	360	—	N.V. Scheeps., "De Hoop," Lobith
N.V. Rederij W. in't Veld, Rotterdam	1	Coaster	—	850	—	—	Deutz diesel	900	—	N.V. Boele's Scheeps. en Mach., Bolnes
N.V. Rederij W. in't Veld	1	Coaster	—	950	—	—	de Industrie diesel	750	—	D. & Joh. Boot N.V., Alphen a/d Rijn
Burmese Govt.	1	Light vessel	—	—	—	—	—	—	—	Scheeps. Ferus Smit v.h. J. Smit en Zoon, Foxhol
Tokyo Senpaku K.K.	1	Cargo	7,000	—	—	—	Diesel	—	—	West Japan Heavy Industries, Nagasaki
Kansai Kisen K.K., Osaka	1	Cargo	4,650	—	—	—	Steam turbine	—	—	Sanyasu Dockyard Co., Osaka

LAUNCHES

Yards in Great Britain and Northern Ireland

Date	Shipowners	Ship's Name and/or Yard No.	Type	Approximate Tonnages		Dimensions (ft.)	Speed (knots)	Propelling Machinery	Total h.p.	Engine Builders	Shipbuilders
				Gross	Deadweight						
July 9	S. African Rlys. & Harbour Administration	R. A. Leigh (T 793)	Tug	140	—	93 21.25 10.5	—	Recip. steam	500	McKie & Baxter	Richard Dunston, Thorne
July 19	Constans (S. Wales)	Beltinge (1251)	Cargo	3,000	4,650	320 b.p. 46.33 24.29	10.5	Sin.-scr. tr.-exp. steam	—	Shipbuilders	Wm. Gray
July 19	Gaselee & Son	Rana (1373)	Tug	100	—	80 b.p. 21.5 10.75	—	Sin.-scr., 5-cyl. diesel	700	British Polar Engine	Cochrane & Sons
July 20	Motorvischerij, N.V., Ostend	Van Oost (848)	Trawler	580	—	170 29 15.25	—	Sin.-scr. tr.-exp. steam	—	Chas. D. Holmes	Cook, Welton & Gemmell
July 31	Royal Navy	Vidal	Survey ship	—	—	315 40	—	Tw.-scr. red. geared diesel	—	Shipbuilders	H.M. Dockyard, Chatham

TRIAL TRIPS

Yards in Great Britain and Northern Ireland

Date	Shipowners	Ship's Name and/or Yard No.	Type	Approximate Tonnages		Dimensions (ft.)	Speed (knots)	Propelling Machinery	Total h.p.	Engine Builders	Shipbuilders
				Gross	Deadweight						
July —	National Benzie Co.	Ben Hittinger (373)	Coastal	—	500	153 27.5 11.5	10	6-cyl., 2-str. diesel	—	British Polar Engines	Chas. Hill
—	Adelaide S.S. Co.	Borda (32)	Cargo	4,054	6,000	405 16 o.a. 53 33	12.5	Recip. steam, exch. turbine	3,500	Govt. Marine Eng. Works, Melbourne	Evans, Deakin & Co.
—	Soc. de Nav. a Vapeur Dahier, Marseilles	Nabeul	Cargo	2,200	3,500	316 58 b.p. 47.58 29.16	12	Recip. steam, Bauer-Wach exch. turb.	1,900	—	Brisbane Atel et Ch. de Bretagne, Nantes
—	Afrikanische Frucht Cie.	Proteus (S 626)	Fruit ship	3,000	—	441 16 50.83 20.16 (draught)	16.5	6-cyl. M.A.N. diesel	4,100	—	Deutsche Werft, Hamburg
June 20	Svenska Orient Line, Gothenburg	Roland	Cargo	1,730	2,910	249 b.p. 42.33 19.16	12.25	5-cyl., 2-str. Atlas Polar diesels	2,100	Atlas-Diesel, Stockholm	Oresunds-varvet, Landskrona
July —	French Nat. Rlys.	Saint Germain	Train ferry	1,400	—	380 o.a. and 366 b.p. 62.1 20.3	18	Tw.-scr., 9-cyl., 2-str. B. & W. diesel	3,000	Shipbuilders	Elsinore S.B.
July 7	Saltens Damps, Bodo	Hamarøy	Pass. & cargo	399	100	135 o.a. and 120 b.p. 23 11 16	12	4-cyl. Wichmann diesel, KaMeWa propeller	600	—	Trosvik Verkted A.S., Brevik
July 18	Cie Maritime des Chargeurs Reunis, Paris	Apsara	Cargo	4,275	7,750 (metric)	380 b.p. 56 26.92	14.25	Sin.-scr., 6-cyl., 2-str., Sulzer diesel	4,200	—	C. Van der Giessen & Zonen's Scheeps., Krimpen a/d IJssel

MARITIME NEWS IN BRIEF

From Correspondents at Home and Overseas

Two new additions have been made to the ship-shore radiotelephone services operated by Cable & Wireless, Ltd. The services opened by the company last December from Barbados and Georgetown, British Guiana, have now been augmented by the addition of a new service from the station at Kingston, Jamaica. The service is available to small ships in the vicinity and operates every day from 1 p.m. to 12 p.m. G.M.T. At Doha, where a telegraph office was opened on May 15, a new service is being operated. It is available between 7.30-7.45 a.m. and 12.45-1 p.m. G.M.T. The wireless circuit from Doha operates to all parts of the world via Bahrain.

The annual statement of shipping issued by the Mersey Docks and Harbour Board shows that 16,072 vessels, of 21,156,984 n.r.t., entered the River Mersey during the year ended July 1. This tonnage is the highest since the war and exceeds last year's figure by 28,116 tons. The total number of vessels entering the Board's docks was 9,180, of 15,308,911 tons, compared with 9,189 vessels of 15,372,207 tons the previous year.

The New Zealand Lines announce that the 50 per cent strike surcharge on outward and homeward berth freight rates has been withdrawn. The special rates which, in view of the high cost of chartering, have been or are being applied to the several vessels recently chartered at the request of outward shippers, will, however, be maintained.

On medical advice Sir Robert S. Johnson has taken a rest from business duties and has resigned as managing director of Cammell Laird & Co., Ltd. He is succeeded by his son, Mr. Robert W. Johnson, who is at present assistant managing director. Sir Robert will continue as chairman of the company.

REVISED regulations under the Merchant Shipping Acts for the examination of skippers and second hands of fishing boats have been issued by the Ministry of Transport and are available from H.M. Stationery Office, price 1s. 6d. The regulations come into force on September 1, 1951.

MR. TOM SYKES, secretary of the Stag Line, Ltd., North Shields, has celebrated his 81st birthday. He joined the firm at the age of 15.

MR. J. B. SCOTT, general sales manager of plant division, Crompton Parkinson, Ltd., has been appointed an executive director of the company, and as from October 1 he will take up a new appointment as assistant sales director (home). He will be succeeded as general sales manager, plant division, by Mr. C. A. J. Martin, whose present position of product sales manager, F.H.P. motors, will be taken over by Mr. R. V. Powditch, product sales manager, Nelson stud welding. Mr. Scott joined Crompton Parkinson, Ltd., in 1939 and was made general sales manager of the plant division in 1948.

With the arrival of the *Stirling Castle* at Southampton on July 27 Capt. W. A. Pace completed his last voyage as master of the vessel. Capt. Pace has retired after 41 years' service with the Union Castle Line, which he joined in 1910. His first command was that of the *Dundrum Castle*, in 1937,

and he was appointed master of the *Stirling Castle* in August 1947, although he had previously commanded the vessel for a short period.

THE Raytheon Manufacturing Company, of Waltham, Massachusetts, announces that Mr. Nathaniel B. Nichols, one of America's leading authorities on servo mechanisms and automatic controls, has been appointed manager of the company's research division. Mr. Nichols had been Professor of Electrical Engineering at the University of Minnesota since 1950.

THE Economic Insurance Co., Ltd., announce that owing to ill health Mr. D. H. W. Arnot has retired from the position of general manager of the company and that Mr. W. H. Murray, at present manager of the company's West End branch in London, has been appointed as his successor.

THE FLAGSHIP of the Polish merchant marine, the *Batory*, has been put into service on a new line from Gdynia to India and Pakistan, with calls at Southampton, Gibraltar, Malta, Port Said, Aden, Karachi and Bombay. The vessel was recently withdrawn from the Gdynia-New York service.

THE Tyne Improvement Commission has approved the spending of £5,800 on the purchase of fork-lift trucks or other suitable appliances for the mechanical handling of cargo on the Tyne Commission Quay, North Shields.

AFTER being closed since March for repairs, the 60-ft. lock entrance at Tyne Dock, South Shields, has been reopened for traffic.

THE keels have been laid of two new destroyers for the Venezuelan Navy at the Barrow-in-Furness shipyard of Vickers-Armstrongs, Ltd. Those who attended the ceremony included the Venezuelan Ambassador and Mme. Sosa-Rodriguez, Capt. de Fragata Oscar Ghersy Gomez, Commander-in-Chief, Venezuelan Naval Forces, Capt. de Fragata Alonso Vilorio, Chief of the Venezuelan Naval Mission in the United Kingdom, and Lt.-Col. Miguel de la Rosa, Venezuelan Air Attache. The destroyers, each of 2,600 tons, will be named *Nueva Esparta* and *Zulia*.

AT THE 63rd annual general meeting held in London of the Atlantic Transport Co., Ltd., Mr. W. J. Weigle, assistant European general manager in charge of freight traffic, United States Lines, was elected a director of the company. Mr. C. H. Kemp and Mr. H. E. Walker were re-elected to the board.

CONSEQUENT upon Mr. W. J. Havelock relinquishing his full-time executive responsibilities in Walter Runciman & Co., Ltd., Mr. C. H. P. Reay, who has been his assistant for many years, has been appointed manager of the firm's shipbroking department.

MR. D. H. TATE, of Middlesbrough, has been elected vice-president of the United Kingdom Pilots' Association. He is the first Tees pilot to hold that position in the 60 years' history of the Association. Mr. Tate was elected a member of the Council four years ago.

MR. LEONARD PEARMAN has been appointed general manager of the London insurance department of Furness, Withy & Co., Ltd.

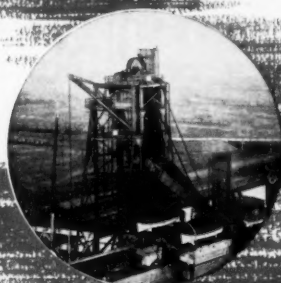


Canadian Pacific Railway European P.R.O.

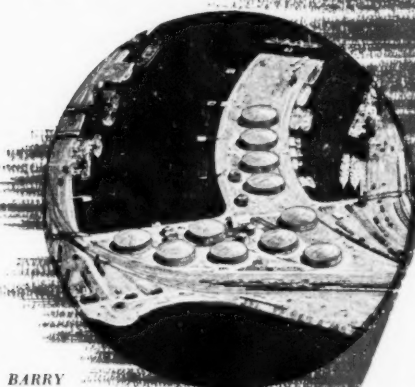
AFTER 39 years' service with the Canadian Pacific Railway in both Canada and the United Kingdom, Mr. Charles W. Stokes (left) has retired from the position of public relations officer for Europe. Mr. G. K. Nield, at present his assistant, has been appointed as his successor. Mr. Nield (right) joined the Canadian Pacific Railway's European head office in London in 1926 as a junior clerk in the publicity department, which since the end of the Second World War has been known as the department of public relations. During the war Mr. Nield served in the Royal Engineers Movement Control. On his return to Canadian Pacific at the end of 1945 he became press assistant to the public relations officer for Europe, being appointed assistant public relations officer in January of this year.



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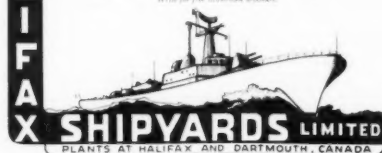
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RESULTS OF RESISTANCE TESTS

Experiments with a former Clyde paddle steamer in which four aircraft jet engines had been mounted were described at the opening session of the international conference of naval architects and marine engineers in London yesterday. Rolls-Royce Derwent V jet engines were mounted on a cradle on the deck of the old paddle steamer Lucy Ashton to give speeds varying from five to 15 knots, so that full-scale resistance tests could be carried out on the hull by the British Shipbuilding Research Association.

Reading a paper on the subject, Sir MAURICE DENNY said that the results gave proof of the sensitivity of full-scale ship resistance to small roughnesses. Fairing the seams of the hull reduced the total resistance by about 3 per cent. When the hull was painted with bluish-grey aluminium paint—which was smoother than red oxide—the resistance was reduced by about 3½ per cent.

Water temperatures varied from 43deg. Fahrenheit at the end of March to 59deg. in early June. At the latter date the hull showed a fine growth of short grass and on the bottom there was a slight scattering of small limpets. At what might be normal surface speed the total resistance had been increased by about 10 to 28 per cent. This was larger than in December and January and suggested that water temperatures had a large effect on fouling.

LORD RUSSELL, president-elect of the Institution of Naval Architects, presided at the opening session and Dr S. F. DORR, president of the Institute of Marine Engineers, presided at a luncheon.

This article reproduced by courtesy of the "Times," from their issue of June 27th, 1951, shows the importance of keeping the hull free from fouling and corrosion.



Photograph by Douglas P. Wilson, D.Sc., F.R.P.S.

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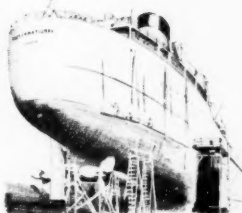
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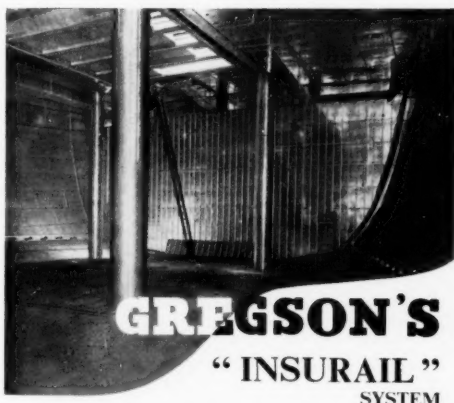
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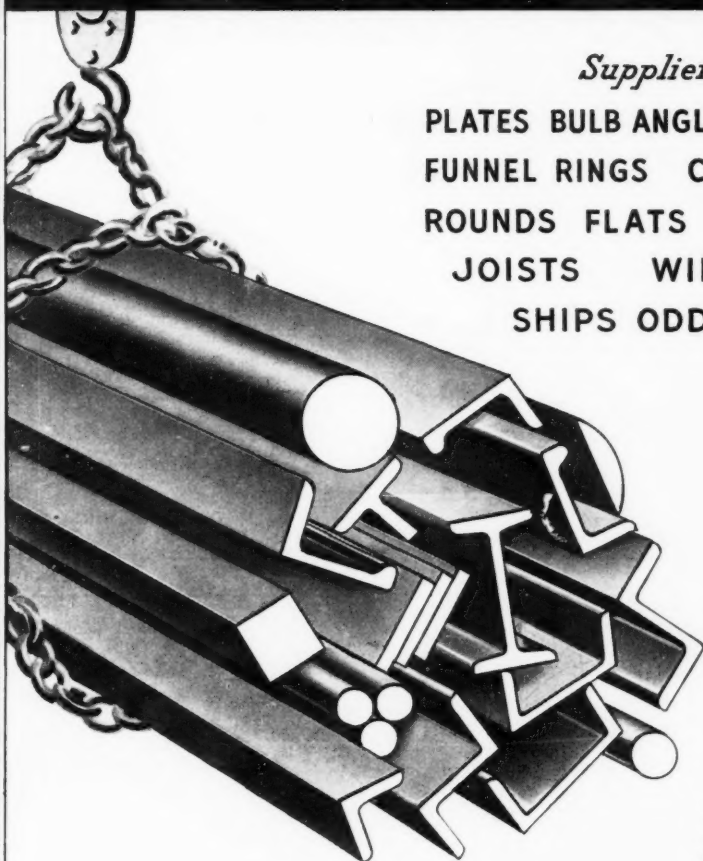
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